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## **Abstract**

The importance of psychological and individual factors of patients with serious illnesses such as hepatitis C. needs to be highlighted. By quality of having hepatitis C disease, it troubled the human life resultantly patients lost hope and interest of life. Self-compassion is a valuable quality to increase wellbeing and self-management of the disease. Present study aimed to investigate the relationship between self-compassion and psychological wellbeing moderated by cognitive-emotional regulation and social support among hepatitis C. patients. This cross-sectional correlational study examined 260 patients of hepatitis C. (131 males & 129 females) from different hospitals of Rawalpindi, Islamabad and Attock through Self-compassion scale (Kristin Neff , 2003), WHO (five) wellbeing index (WHO, 1998) and Multidimensional social support scale (Winefield & Tiggemann, 1992). Study findings indicated that positive domains of self-compassion: self-kindness ( $B = .26^{**}$ ), common humanity ( $B = .75^{**}$ ) and mindfulness ( $B = .26^{**}$ ) are significant positive predictors and negative domains of self-compassion: isolation ( $B = -.25^{**}$ ) and over identified ( $B = -.05^{**}$ ), are significant negative predictors of psychological wellbeing of hepatitis C. patients and significantly correlates with psychological well-being, cognitive-emotional regulation and social support. While self-judgment did not show any significant effects. Moderating effect of cognitive-emotional regulation and social support from family and supervisors strengthens the relationship between self-compassion and psychological well-being. Results further demonstrate that demographic variables age, family system and marital status have shown significant effects on all study variables. Findings of the study have been discussed in the light of previous literature and cultural context.

**Key words:** Self-compassion, psychological wellbeing, social support, hepatitis C.

## Chapter I

### Introduction

#### Significance

This study will be significantly endeavoring in highlighting the importance of psychological and individual factors of Hepatitis C patients. When diagnosing a physically ill person, it is just as important to consider the psychological aspects with physical aspects since they play a vital role in creation an infection chronic or terrible. In this respect, hepatitis C. has been shown to be a challenge for the health care system and to the health and well-being of the patients. Awareness of the need and importance of psychological aspects in rehabilitation and diagnosis of any disease in Pakistan is very low, even among health professionals.

Consequently, the main goal of this study is to examine the relationship of self-compassion, cognitive-emotional regulation, social support and psychological wellbeing. Concerning current study, it is important to consider the fact that lack of social support contributes in hepatitis C. patient's mindset, quality of life and adjustment. Discoveries of current study will assist the professionals in identifying the allied psychological aspects, which can positively influence the management and treatment of hepatitis C. patients.

## **Hepatitis C**

Hepatitis C. is one of the crucial health concerns of today (Miller, McNally, Wallace, & Schlichthorst, 2012). With an estimated 170 million people infected with Hepatitis C worldwide, this disease is proving to be an escalating economic, social and health burden (Lavanchy, 2011; Hajarizadeh, Grebely, & Dore, 2013). Although the prevalence of hepatitis C. in the United States appears to have declined over the past two decades (Williams, Bell, Kuhnert, & Alter, 2011), Western and Northern Europe (Duberg, Janzon, Bäck, Ekdahl, & Blaxhult, 2008; Delarocque-Astagneau, et al., 2010), Japan (Chung, Ueda, & Kudo, 2010) and Australia (Razali, 2007), In less developed and developing countries, the burden of the disease is constantly growing (Hajarizadeh et al., 2013). There is an increased prevalence of psychiatric co-morbidity in patients with chronic Hepatitis C infection and emerging evidence suggests that mental health problems may be associated with the infection itself, possibly mediated by an effect on the central nervous system (Schaefer et al., 2012).

Recent published data (2009/10 to 2015) on hepatitis C prevalence proposes that there is extremely high frequency of hepatitis C. in underdeveloped areas (both rural & urban). However, in Pakistan less consideration has been paid to the socioeconomic dimension of Hepatitis C. Considering the fact that the real load of hepatitis C. in Pakistan is in rural areas because majority of population lives in these areas. Undeniably, increased attention is needed in rural areas to gauge hepatitis C. prevalence for improved valuation and application of preventative policies. Furthermore, according to the latest WHO recommendations, it is imperious to put additional determination in defining the occurrence of active hepatitis C. infection in Pakistan (Abbas, Ali, Muhammad, Shaw, & Abbas, 2009; Ahmed, Irving, Anwar, Myles, & Neal, 2012; Janjua et al., 2010; Umer, & Iqbal, 2016).

In Pakistan hepatitis C. prevalence is generalized, with maximum hepatitis C transmission caused by routine community, drugs and medical related practices (Qureshi, Bile, Jooma, Alam, & Afrid, 2010; Trickey, et al., 2017). In 2014, an estimated adult HCV seroprevalence of 6.7% was reported in Pakistan (Gower, Estes, Blach, Razavi-Shearer, & Razavi, 2014). Many hepatitis C patients are in the age group of 30 to 40 years and their complications may increase in the next 10 to 20 years (Kalsoom, Masood, & Jami, 2017). Despite the fact that the infection itself is hardly an instant threat to the life. Nevertheless, it includes living with emotional, social, physical, and fiscal consequences as well. Even though chronic hepatitis C. (CHC) can lead to life-threatening problems such as liver failure and cirrhosis, so many patients with hepatitis C. are unaware and asymptomatic of their disease before diagnosis. Nevertheless, these patients steadily report a major reduction in wellbeing as compared to other people who are not exposed to hepatitis C. This damage is typically improved after viral clearance (Castera, Constant, Bernard, de Ledinghen, & Couzigou, 2006).

Hepatitis C. patients' needs to learn to cope and manage the uncertainty of the development of the disease (Sgorbini, O'Brien, & Jackson, 2009). Most of times these patients have to face the terror and social stigma connected with hepatitis C. Who to inform, when to inform, and the way to inform others about the infection is a major problem as well. Most of the past studies investigated the clinical effects for hepatitis C. patients. However, the psychological influence of the disease still needs to work more. Practical research of Rodger and colleagues (1999), has also explored poor quality of life in such patients.

Groessler et.al. (2008) discovered that diagnosis of hepatitis C. develops distress. The disease conveys a threatening prognosis and the negative images are connected with transmissible disease and stigmatized risk factor. Patients of hepatitis C. can suddenly sense unclean regardless of their

past lifestyle, and discover their new sickness framed by disgrace and judgment. Breathing with Hepatitis C often demands significant physical, emotional and cognitive adjustments as well. Devastating symptoms and the medicines used to treat hepatitis C. may harm daily activities, work performance and social roles. Social support is essential in this time for adjustment. Relations may be stressed by concerns about victims' uncertain health. Family, friends and partners, may withdraw due to terror of disease or disgust. Cognitive and physical impairments may minimize social interaction. Study of Hocking and his colleagues (2015) also recommended that family reaction to illness can amend negative effects.

Healthcare specialists' perform a major role in offering supportive guidance for hepatitis C. infected patients. When it comes to the medical outcomes of hepatitis c, it is important to highlight the psychological aspects as well. To prevent psychological problems caused by hepatitis c, it should be considered to improve various ways of coping strategies. In this regard, positive psychology plays an important role in understanding and improving one's attitude towards oneself and others.

### **Self-compassion**

One of the important traits included in the field of positive psychology is self-compassion. Exploration and application of self-compassion as a treatment process has increased considerably in past 23 years (Leaviss & Uttley, 2015; Muris & Petrocchi, 2017). Compassion can be stretched out towards self when suffering occurs – when the life's external situations are simply tough to bear. Self-compassion is similar, when suffering arises from our own faults, failures or personal shortages. Neff underlined the difference between self-esteem and self-compassion, mentioning self-compassion as a more truthful understanding of one's own strengths and weaknesses (Neff, 2009). She further illustrated that the negative features often related with narcissism, self-esteem

and the wish to feel superior, which were not linked self-compassion (Neff, 2009). To practice mindfulness involves living in the current moment, engaging in observation of innermost experiences and release of ego (Hollis-Walker, & Colosimo, 2011).

In a study by Hollis-Walker and Colosimo (2011), self-compassion was explored as a basic attitudinal factor in mindfulness and mindfulness was partially associated with happiness. However, the term mindfulness used by Neff is more related to identifying and regulating emotions. They discovered positive relations of common humanity and mindfulness and negative relations of isolation in prediction of happiness. They recommended these factors as a key role in healthy life. Self-compassion is basically a positive attitude that helps us to cope and manage failure or personal suffering. Gilbert (2005), explained self-compassion as a response to personal difficult situations with kindness, warmth and caring instead of harsh judgment; accepting suffering as a mutual human experience that encourage feelings of association with others instead of being isolated; and being consciously aware of negative reactions rather than over identifying them.

Many researchers explored self-compassion, they defined it as being open in times of suffering and handling oneself with gentleness. They also explained it as protective factor which buffer negative mental conditions like stress, anxiety and depression in adolescents (Bluth, et al., 2016; Játiva, & Cerezo, 2014) and adults (Westphal, et al., 2015). Precisely, self-compassion explained as three constructs which mutually interact: Self-kindness vs. self-judgment, common humanity vs. isolation, and mindfulness vs. over-identification (Neff, 2011).

Neff (2011) clarified that self-Kindness is different from self-pity. It is not just being understanding and caring with ourselves but also treating personal flaws and insufficiencies with



gentle and understanding. The use of soft and supportive emotional language is necessary too. Instead of criticizing ourselves for suffering, self-compassionate means admitting that we are flawed. Likewise, when external life surroundings are problematic, self-compassionate individuals offers themselves comfort and ease.

The practice of common humanity in self-compassion contains realization that all people suffer, make errors, and feel insufficient in some way. Self-compassion perceives deficiencies as part of common human condition, it sees self's weaknesses with broad and comprehensive perspective. Likewise, hard life situations are enclosed in light of common human experiences, so that at the time of suffering one should perceive connected instead of disconnected from others. Sometimes, people feel themselves isolated from others when they face or thought about their personal flaws or tough times. Rather than practicing rational thought method, they think that failing, having weaknesses, or undergoing through hardship is somehow abnormal. "Why me?" is an irrational thought process that bases strong feelings of disconnection.

Mindfulness, is the third positive factor of self-compassion. It comprises of being conscious of existing moment, experience in pure and stable manner so that one neither disregards nor ruminates on hated aspects of one's life (Brown & Ryan, 2003). First, it is needed to identify that one is struggling in order to spread compassion towards the self. Whereas it might seem that personal struggling is obvious, so many people really don't stop to recognize their own discomfort. Reason is that they're very busy in solving problems or judging themselves.

Mindfulness also avoids being tangled in and passed away by the story-line of one's own pain (Neff, 2003). When experiencing this, people use to overstate and compulsively fixate on negative thoughts and emotions related to themselves, meaning that they are unable to see

themselves or their difficulty clearly. Maintaining a stable perspective or mindfulness, or when confronted with difficulties (Neff, 2003), has been expressed as social support twisted inwards (Bluth, Roberson, et al., 2016; Breines, et al., 2014). For example, when people are practicing self-compassion or when they are able to propose themselves the same valuable support that they obtain from their peers or friends, they experience better positive results.

Practice of mindfulness encourages the approach of openness, inquisitiveness and recognition. When exercising the strategy of mindfulness with uniformity, it is supposed that one is less expected to evade or defeat certain emotions that seems less intimidating. According to Salzberg (2011) self-blaming vanishes when an experiences is not subject to self-judgment and emotional weakness, but this is also recognized as component of being human. To put it another way, rather than continuously engaged our thought processes in making things healthier and harshly criticizing ourselves for not fulfilling personal targets, we just let these things go to try to make them different from their reality. In this procedure, we implement a sympathetic attitude approaching ourselves. After exercising regularly, this attitude eventually becomes compatible in ongoing relationship with our own selves.

There are numerous conceptualizations and definitions of compassion (Gilbert et al., 2017; Strauss et al., 2016) which classify the cognitive, emotional (Neff, 2016) and behavioral domains of identifying and reacting to struggle and suffering (Gilbert, Clarke, Hempel, Miles, & Irons, 2004). Self-compassion is associated with psychological wellness (Shapira & Mongrain, 2010) and low levels of distress (MacBeth & Gumley, 2012) and psychopathology (Van Dam, Sheppard, Forsyth, & Earleywine, 2011; Krieger, Altenstein, Baettig, Doerig, & Holtforth, 2013; Pinto-Gouveia, Duarte, Matos, & Fráguas, 2014; Zessin, Dickhäuser, & Garbade, 2015). Gilbert

hypothesizes self-compassion as a sensitivity to struggle or suffer in self and person's ability to manage their own problematic emotions (Gilbert et al., 2017).

Improved self-compassion is connected with high levels of positive wellness through mindfulness, self-gentleness and sense of shared humanity (Wren et al., 2012). Allen and Leary (2010), explained in their study that the practice of more adaptive and problem-solving coping strategies like looking for social support or practicing positive reframing can lead to healthier results in Chronic Health Conditions (physical and mental) including decreased stress (Sirois & Rowse, 2016). Individuals who practice high level of self-compassion expresses more adaptive reactions, which includes improved health-promoting performances for example control over their diet, attending monthly check-ups or exercising, each one is a potentially significant part of managing Physical Health Conditions (Sirois, 2014). According to Terry and Leary (2011) low level of stress helps to increase persons' adherence and lead to healthier organization and control over their health and also reduce the likelihood of growing a mental health problem. Therefore, rehabilitations that target to improve self-compassion can be valuable for coping with health conditions and can defend mental wellness (MacBeth & Gumley, 2012).

Previous investigations in mental wellness and community populations (Kirby, 2017) features the potential pathways from self-compassion to reduced psychopathology, through improved coping and increased wellbeing (Wilson et al., 2019). Approaches which are based on self-compassion seems promising for people with chronic physical conditions like hepatitis C. as confirmed in enhanced self-compassion conclusions. In return, these may lead to enhanced psychological consequences. Kiliç and his colleagues (2020) in their research confirms that self-compassion and emotional, as well as physical, outcomes are significantly correlated with each other.

People who are suffering with such prolonged disease like hepatitis C. reported some psychological problems (i.e., distress, anxiety, loneliness etc.) as well. Blaming and judging their selves is common. Self-compassion is an important topic that should be worked out in this regard. As it is conceptualized as the capability to be kind and caring toward oneself in times of suffering, failure, or perceived inadequacy (Gilbert, 2005). It also helps people have more ability to cope with the disease.

### **Psychological wellbeing**

In previous years, the attention of mental health conditions and its prevention has moved from solely treating to improving positive characteristics of mental health. New target in mental health-care system is the elevation of wellbeing (WHO 2005; Dodge, Daly, Huyton, & Sanders, 2012; Keyes, 2007). The perception of psychological wellbeing is originally developed in the discipline of health. It was used as a synonym of healthfulness. Psychological wellbeing is a continuous emotional and cognitive evaluation of person's life that indicates to experience satisfying emotions, life gratification, and reduced negative experiences (Yazdani, et al., 2018). In a study Khumalo, Temane and Wissing (2010) defines mental health or mental wellbeing as a positive state of mental, emotional, social and physical wellness, not only the absence of disability or frailty. Mental wellbeing includes absence of psychological illness, as well as contains the development or prevalence of positive behavior and thought. It also contains many other aspects such as active lifestyle, positive attitude, balance of emotions, pro-social behavior, life satisfaction, personal optimization etc. (Khumalo, Temane, &Wissing, 2010).

Presently there are numerous explanations of wellbeing with two core concepts being subjective wellbeing and psychological wellbeing (Diener, 1984). Subjective wellness shapes on hedonic structure which is centered on struggling for positive experience. Ryff and Singer (1996)

explained this phenomenon as well. According to them it is typically measured as life satisfaction in combination with stability between positive emotions and negative emotions. Anyhow, the criteria that people use to evaluate their subjective wellness were not theorized in this outline. On the other hand, Carol Ryff presented the concept of psychological wellness with the target to develop indicators of optimistic human functioning which were consistent with eudemonic perception of happiness (Ryan & Deci, 2001). Another well-investigated theory by Ryff, (1989) in eudemonic practice is the theory of self-determination that declares that the satisfaction of basic psychological needs as an essential part to wellness and growth.

Wellbeing reproduces the extended goals of treatment from medical to broader health care treatments, that's why it is now usually proposed as a theme for product measures. There are many reliable techniques of assessing wellbeing exists, including techniques that emphasis on the existence of optimistic emotions and nonexistence of negative emotions, satisfaction of life, social commitment (Ryff, 1989; Nicoletti, et al., 2017) and physical wellbeing (Ryff, 2014). Such techniques of subjective wellness highlight the significance of hedonic features of experience, for instance happiness, gratification, and pleasure (Lamers, Westerhof, Glas, & Bohlmeijer, 2015).

A study on hepatitis C. virus (Schaefer, et al., 2012) explored that mental health complications normally develop in chronic infection with hepatitis C. virus and during its antiviral treatment. These patients repeatedly report neuropsychiatric symptoms such as exhaustion, anxiety, hopelessness and some cognitive disorders. With reference to neuropsychiatric symptoms, one can identify two distinguishing patterns in its association with hepatitis C. virus infection. On one side, patients with chronic hepatitis C express high occurrence of psychiatric disorders like depression. On the other side, patients with psychiatric records show high rates of hepatitis C. infection than the normal population (Marinho, & Barreira, 2013).

HCV infected patients experience several emotional and social stressors that have significant influence on wellness. These stressors comprise of adjustment and management of the disease and developing changes in lifestyle (El-Kader, Al-Jiffri, & Al-Shreef, 2014). Study on psychological wellness, when struggling with stress, has shown mindfulness as effective factor in developing optimistic emotional coping to illnesses (Kabat-Zinn, 1982).

Mental sickness also present significant financial burdens to patients, decreases productivity and increases health-care expenses. Hence, there is a crucial need for reasonable and effective schemes to encourage psychological wellbeing and recover general health status, specifically for the people with chronic illnesses.

### **Cognitive-emotional regulation**

The concept of emotional regulation is closely associated with self-compassion, as it seems to be a specific way of coping. As stated by Gross, (2015) cognitive-emotional regulation is cognitive way of dealing the consumption of emotionally arousing information. Study carried out on patients explored that the capability of regulating emotions is linked with reduced anxiety and better acceptance of disease. While the trouble to manage emotions is linked with depression, loneliness, and disappointment with received social support (Gillanders, Wild, Deighan, & Gillanders, 2008). Earlier researches have presented that emotional intelligence plays important role in reduction of anxiety and hopelessness in patients.

Cognitive-emotional regulation is denoted as a person's thoughts and feelings after experiencing any negative event and is different from similar constructs, for example coping. Other emotion regulation strategies like behavioral ones are associated with specific actions (Gross, 2015). Cognitive-emotional regulation is mentioned as combination of all conscious and unconscious approaches that individuals practice to increase positive emotions, reduce negative

ones and increase their discipline (Gross 2001). Study by John and Gross (2004) has presented that people vary in their usual methods of emotion regulation and these differences have shown some outcomes for different areas of emotional management, like cognitive, emotional and social functioning.

Cognitive-emotional regulation is explained as mental strategies that individuals consciously use to cope by the consumption of emotionally developing information, and it contains five adaptive and four maladaptive strategies. Self-blame (blame oneself for what has experienced), rumination (feeling or thinking about negative events all the time), other-blame (blaming others for negative events) and catastrophizing (assuming that worse will happen or present an event more badly than actually it is), and these maladaptive strategies can lead to emotional or psychological problems (i.e., unhappiness, anxiety or other dangerous actions). On the other hand, positive refocusing (thoughts of other pleasant events), acceptance (accepting the situation), planning (what steps should be taken to manage the event), positive reappraisal (attaching optimistic meaning to the event for personal growth) and putting into perspective (compare negative event with something similar to get clear and accurate idea) are five adaptive strategies which helps to improve mental health and wellness (Extremera, & Rey, 2014; Extremera, Quintana-Orts, Sánchez-Álvarez, & Rey, 2019).

Patients those battle with chronic diseases can evolve emotional stress, which may results in damage to healthier behavior, cognitive and social functions and specific and non-specific physical responses (Kojima, et al., 2007). Recommended by Moorey and Greer (1989), the procedure of mental adjustment of the illness is focused on the assessment and explanation of the illness by patients, which effects their emotional responses and behavior. Three components have been identified in this adjustment procedure: negative understanding of diagnosis, infection

control, and the last is prognosis. Then, there are five different methods or coping styles to deal with the disease, each one represents the different approach of understanding the disease: fight with spirit, denial, hopelessness/ helplessness, worry and anxiety. For example, patient with sense of hopelessness, considers diagnosis as death sentence. He thinks that no one can save him and his hopelessness is his future (Barberis, et al., 2017).

Explained that self-compassion comprises of how a person narrates to oneself during hard times, it has been recommended that emotion regulation strategies are may be a possible mechanism by which self-compassion functions (Finlay-Jones 2017). Self-compassion and adaptive strategies of emotion regulation, both independently exhibits the negative relationship with mental health syndromes (Neff, 2003; Aldao, Nolen-Hoeksema, & Schweizer, 2010; Macbeth & Gumley, 2012; Berking & Whitley, 2014).

Countless individual dissimilarities occur in cognitive activities and thoughts through which people manage their emotions in reaction to life experiences and trauma. Cognitive-emotional regulation strategies are different from coping. On the one hand coping involves non-emotional activities; Emotion regulation on the other hand involves procedures not usually considered in coping literature, for instance, maintaining or regulating optimistic emotions. Research advises that accepting, bearing, and adapting negative emotions are the most critical cognitive-emotional regulation strategies for preserving and reinstating mental wellbeing (Berking & Whitley, 2014).

### **Social support**

Another related factor with hepatitis C. is the stigma, which might produce nervousness and the terror of transferring the virus. This terror may be the key reason for social separation and



reduced closeness in relations (Armstrong et al., 2016; Younossi, Kallman, & Kincaid, 2007). Stigma can be explained as a bunch of behaviors communicated by a leading crowd, which perceives other people's actions as being publicly intolerable. Conception of stigma, connected with shameful relationships, and abnormality from expected "norm," holds extended past in the perspective of transferable illnesses (Bogart et al., 2008), same is with hepatitis C. With judgment at workplace or health settings, these standards, norms, actions, and opinions can develop a sense of isolation from family and community relations along. Not only patients but also health care experts can be disturbed by stigmatization, which are not protected by labels and criticisms that may also effect treatment. These matters may reduce the search for medical assistance and encourage isolation in patients (Butt, 2008). Moreover, numerous researches have proposed that stigma is linked with poor level of treatment adherence including in HCV patients (Kamaradova et al., 2016; Treloar, Rance, & Backmund, 2013).

Social support is one of the most significant aspect of Hepatitis C. virus infected people. It is actually an emotional, practical and informational back up from others, such as family, peers friends and coworkers; that support actually received from others or merely perceived to be accessible when required (Thoits 2010).

Social support is the most studied concept in community psychology. Some researchers offered a comprehensive description of social support as: "support reachable to person through social links to other persons, clusters, and larger community" (Lin, Simeone, Ensel, & Kuo, 1979). Precisely, perceived social support denotes as person's belief that social support is accessible and that it delivers what the person considers essential (Sarason, Sarason, & Pierce, 1990). Gottlieb and Bergen (2010) delivered the following universal definition: "Social resources that individuals perceive to be accessible or that are actually delivered to them by nonprofessionals in context of

both informal and formal helping associations". Several investigations have examined the influence of social support on physical health (Chatzisarantis, Hagger, & Smith, 2007; Martos & Pozo, 2011; House, Landis, & Umberson, 1988; Salovey, Rothman, Detweiler, & Steward, 2000), mental health (Melling, & Houghet-Pincham, 2011; Rimé, Páez, Basabe, & Martínez, 2010; Pons-Salvador, Cerezo & Trenado, 2014; Sherman, Skrzypek, Bell, Tatum, & Paskett, 2011), psychological wellness (Blair & Holmberg, 2008; Ownsworth, Henderson, & Chambers, 2010; Taylor & Brown, 1988), and quality of life (Im Song, et al., 2011; Newsom & Schulz, 1996). Evaluation of the literature demonstrates that some authors have scrutinized perceived social support and its assessment by the receiver, however, others have explained social support from sources for example family, peers or close friends (Vangelisti, 2009; Lyons, Perrota, & Hancher-Kvam, 1988 ; Zimet, Dahlem, Zimet, & Farley, 1988).

Social supports is obtained from members of social system in which person belong; the simple presence of social network does not assure the facility of social support. It can be said that, social support appears from considerable assistance by others – in form of either emotional, moral, informational, material, or company needs – which is documented as support by both the supplier and the receiver. Research specifies that the connotation between received support and distress is infrequently muddled with fact that people with high stress normally receive most amount of social support and also have the worst mental wellness (Lakey, Orehek, Hain, & VanVleet, 2010). Researchers recommended that support efforts can be failed or sometimes produce feelings of ingratitude, or hazard to self-esteem (Lakey & Orehek, 2011). Social Support helps persons after bad occasions to manage their emotions positively.

Social support has several aspects, and it pleases a person's psychological, emotional, cognitive and physical requirements (Huang, Chengalur-Smith, & Pinsonneault, 2019).

Informational support is associated with assistance in shape of knowledge, recommendations, advice and ideas that could be beneficial to this person. Emotional support is the explanation of innermost feelings for example, sympathetic, concern and attentiveness (Liang, Ho, Li, & Turban, 2011). It is proposed that giving and getting support between two parties is mutual (Crocker & Canevello, 2008). Consequently, if the awareness of informational support is strong, a receiver is more likely to respond with informational support in return. Hence his links with peers in the group are reinforced as the shared support continues, highlighting the impression of group norms on this receiver; the consequence is the receiver's improved conformance with group norms (Cialdini & Trost, 1998).

Emotional social support directs that an individual receives emotional assistance such as care, acceptance or sympathy from a social group. When confronting with difficulties, an individual requires not only direct assistance but also touching expressions that bring reassurance and care, indirectly underwriting a solution to the problem (Liang, Ho, Li, & Turban, 2011). By emotional assistance, one could explain emotional feelings to another. The care consumers feel balminess and inspiration and tend to perceive the positive insight of the giver. However, in this helpful environment, receivers would sense that others grasp positive approaches toward them (Hu, Chen, & Davison, 2019).

### **Literature review**

Hepatitis C. causes a great deal of threat to patient's lives, their health and health care system. Hepatitis C. is estimated to be prevalent recently at global level at around 2.4%, with up to 170 million people infected, who now assumed to stepped up to chronicle stage of infection. According to WHO in 2012, 70 to 85 percent of new patients could not become virus free.

While having 6th largest population worldwide (Desa, 2015) it is assumed that after China, Pakistan host 2nd largest number of hepatitis C. virus infections (Gower, et al., 2014). Whereas internationally hepatitis C. antibody occurrence is predicted at just 1% (WHO, 2017). There are some famous countries where hepatitis C. antibody occurrence has extended to high levels, for instance Egypt (in the total population) with 8.6% antibody prevalence (Ayoub, & Abu-Raddad, 2017), and Pakistan with prevalence of 4.9% in 2007-2008 (Qureshi, et al., 2010). Although in Egypt hepatitis C. is well categorized and the drivers of HCV spread have been quantified (Miller, & Abu-Raddad, 2010; Ayoub, et al., 2017). Whereas, Pakistan's epidemic overall remains poorly understood and categorized (Umer, & Iqbal, (2016).

Bearing in mind that before and throughout the treatment, the influence of hepatitis C. infection in person's mental health and wellness, should be considered as important as treatment. Besides hepatitis C. virus-associated hopelessness, further studies are required to illustrate the side effects of disease, treatment and their effect on mood.

Both in previous and in current literature, the relation among biological, psychological (Kleinman et al., 2012) and social health along with the doubts about treatment and hepatitis C. virus are well documented (Hong et al., 2011; Armstrong et al., 2016). Emotional stress and syndromes related to depression, have been stated in hepatitis C. patients who have not yet been treated (El Khoury et al., 2012; Alavi et al., 2012). Moreover, researches propose that insufficiency of community relations is an important threat element for broad based illness, humanity and harmful insinuations for health (Valtorta, Kanaan, Gilbody, & Hanratty, 2016; Cacioppo, Capitanio, & Cacioppo, 2014). Whether these complaints are owned by ambivalence of existing with chronic disease, with possible life intimidating difficulties and to other psychological and social factors, left under discussion.

In bio-psychosocial model of the illness and the management, it is important to recognize hepatitis C. virus's clinical, psychological and social influence on wider life perception and how people practice it. Primary rules of this model, that practice a holistic approach concerning infection, contains the physical, mental and social domains of the individual's life and the insight that people struggles as a whole. Nature and the mental assets of the patient and the specific ecological situations in which an individual survives must be explained (Papadimitriou, 2017). On the flip side positive psychology and concentrating on wellness have motivated investigation into the feature of relationship among feeling, thoughts and health; specifically, the relation between personal wellness and health consequences (Okely & Gale, 2016). In association with chronic illnesses such as hepatitis C. virus infection, wellbeing should must carry the WHO's comprehensive description of health and conditions of wellness (Misselbrook, 2014). Previous work describes this concept as a mixture of three different components, each apprehending a different feature: valuation of life (excellence of ones' life and general satisfaction of life), hedonic and eudemonic wellness.

Investigations into self-compassion are on the rise, and the discoveries indicate a link to positive wellness in numerous recent studies. A meta-analysis of fourteen self-compassion researches with healthy adults reported a significant effect representing a negative relationship between psychopathology (nervousness, depression and distress) and self-compassion (Macbeth et al., 2012). Other research conclusions with adults from university and social sample, have presented positive attitudes toward life satisfaction, happiness (Baer, Lykins, & Peters, 2012), coping skills, positive impact (Leary, Tate, Adams, Batts & Hancock, 2007), emotional intelligence, spirituality, inspiration for self-improvement (Breines & Chen, 2012) and general

wellness (Bishop et al. 2004; Neff & Vonk 2009; Neely, Schallert, Mohammed, Roberts, & Chen, 2009; Heffernan, Quinn, McNulty & Fitzpatrick 2010).

Numerous researches propose that psychological wellbeing containing life satisfaction and social interactions are associated with higher self-compassion (Neff, 2003; Barnard & Curry, 2011). Whereas, inferior self-compassion is constantly connected with indications such as worry, unhappiness, narcissism (Macbeth & Gumley, 2012), self-judgment and avoidance (Neff, 2003; Leary, Tate, Adams, Allen, & Hancock, 2007; Neff & Vonk, 2009).

In research by Neff and McGhee (2010), self-compassion was negatively associated with grief and anxiety and positively with coherence (the belief that one senses associated to others). Furthermore, the relation between family functioning variables (i.e., parental support, attachment) and wellbeing (i.e., anxiety, connectedness and depression) was found to be moderated by self-compassion.

Theoretical explanations have been discussed between the explanations of mindfulness in academic work. Through a lot of argument and explanations, two sections of mindfulness have been offered consist of (a) self-regulation of dedication, defined as carrying awareness to the focus of consciousness so that one can permanently engage in different spheres of thoughts, spirits and feelings, (b) The direction of the experience, it means the approach or style of joining the existing moment (Bishop et al. 2004).

In contrast, self-compassion emphasizes on the strategies of coping employed when experiencing sorrow (Germer 2009), it requires an active factor of engaging in self-discipline (Neff & Pommier, 2013). Self-compassion is especially important in times of grief. It involves not only calming the pain but also acknowledging it as a part of a shared human practices. Relationships

with oneself are the core of self-compassion (Baer et al. 2012). Identifying that mindfulness brings consciousness to a person's grief and that self-compassion resolve and amends that grief, person imagines that he has become better aware of his sorrows and pains (Bluth, & Blanton, 2014).

Lately, self-compassion has also been shown as a adjustable trait which can be reinforced through learning and exercising self-compassion skills in youth (Bluth, Gaylord, Campo, Mullarkey, & Hobbs, 2016). Empirical studies on interferences which focus on humanizing self-compassion have demonstrated improvements in optimism, life satisfaction, compassion for others, self-efficacy, body appreciation and greater decreases in anxiety, rumination, depression, and stress in adult samples (Neff et al., 2013; Albertson, Neff, & Dill-Shackleford, 2015 ; Smeets, Neff, Alberts, & Peters, 2014; Kelly & Carter, 2015). The study of Brophy and his fellows (2020) provides meaningful insight into diverse sub-dimensions of self-compassion, and how accepting these sub-dimensions may influence the conceptualization of the relation between attachment, psychopathology, and quality of life. Future research is needed to understand this relationship better, including studies that consider substitute conceptualizations and methods of self-compassion. Terry and Leary (2011) claimed that self-compassion may be helpful in self-regulation of emotions, due to self-compassion's emphasis on plummeting self-blame that can interfere with self-regulation.

Self-compassion has been linked with healthy behaviors such as stress management, sleep activities, and exercise (Sirois, Kitner, & Hirsch, 2015). In a similar vein, self-compassion may enable mental health associated behaviors including seeking expert help. Individuals high in self-compassion have established more positive health-related thoughts, more positive affect, greater psychological well-being, reduced negative emotional responses to health problems, and are more likely to pursue medical attention in the face of physical health conditions (Brenner et al., 2018;

Terry, Leary, Mehta & Henderson, 2013). Self-compassion may also assist psychological help seeking through comparable avenues (Terry et al., 2013). Recent research has specified that self-compassion reduces the stigma related with psychological help seeking in adults (Heath, Brenner, Lannin, & Vogel, 2018) and decreases the negative impact of maleness on men's self-stigma of psychological help pursuing (Heath, Brenner, Vogel, Lannin, & Strass, 2017).

Recent research has established a link between self-compassion and psychological wellness, including happiness, optimism and decreased anxiety and rumination (Neff, 2009). The findings from the Hall, Row, Wuensch, & Godley, (2013) research support the role of self-compassion in mental and physical wellness; however, it may be more beneficial to look at the three compounds that comprise Neff's (2003) conceptualization of self-compassion instead of the overall measure. The three compounds demonstrate different effects on physical and mental well-being, and future research may deliver additional insight into the difficult patterns connected with wellbeing. The writers support McNulty and Fincham's (2011) point that wellbeing is a complex idea that requires reflection of both intrapersonal and interpersonal frameworks.

Based on a general review of literature of clinical, humanistic and developmental psychology, as well as existential and practical philosophy, Ryff, et al., (1996) explained psychological wellbeing as a progression of self-realization, entailing six dimensions: independence, environmental mastery, personal growth, optimistic relations with others, purpose in life and self-acceptance. Ryff (2014) reviewed over 350 empirical researches on psychological wellness that have been conducted in the previous decades. Longitudinal studies display that high levels of mental wellbeing serve as protective factor against mental infections and psychopathology (Keyes, Dhingra, & Simoes, 2010; Lamers, et al., 2015; Wood, & Joseph, 2010) and that it is also connected with biological markers of physical fitness, reduced hazard for various



diseases such as Alzheimer's disease, and a lengthier life-duration (Ryff, 2014). The growing evidence of positive consequences of mental wellbeing makes it valuable to study whether we can increase it (Weiss, Westerhof, & Bohlmeijer, 2016).

The perception of psychological wellbeing was developed primarily in the context of health and was used equally with wellness. Mental wellness is not only defined as lack of illness or disability but also positive mentality, social wellbeing and physical wellbeing (Khumalo, Temane, & Wissing, 2010; Keyes, 2002). Another important factor of the lives of people infected with hepatitis C. virus is social support. People infected with the hepatitis C virus face severe psychological and psychiatric complications. These problems are obvious challenge in handling the hepatitis C. virus, which can clearly affect care of patient, as well as modify the progression of the illness.

From psychological point of view, aspects such as information, social context, personal opinions, personality characteristics and how they cooperate with health-encouraging activities, contributes in implementing customized adaptive strategies. In addition, the symptoms of common body ailments associated with hepatitis C. can vary from muscle soreness to chronic exhaustion. (Armstrong et al., 2016). The disagreement that coping and activities can be measured as two different procedures, which engage in different places over time, usually involves a pre-action mental process (e.g., planning).

Investigators including Garnefski, Kraaij and Spinhoven (2001) have lately begun to study cognitive-emotional regulation modules (individual's thoughts) distinct from other approaches like behavioral policies (what individuals really do); quarreling that coping and activities can be measured as two different procedures, which engage in different places over time and usually

involves a pre-action mental process (e.g., planning). This is an important error, as ill-being and wellbeing can be measured as independent, separate areas of mental operations, in such manner information related to associates of one does not essentially extend to the other (Keyes, 2002; Ryan et al., 2001; Ryff et al., 2006). To put it another way, wellbeing must be considered not only as the deficiency of psychopathology, but also in reference of strengths and capacities (Seligman & Csikzentmihalyi, 2000). While numerous investigations have inspected the relation between habitual use of cognitive approaches and psychopathological indications, significantly less consideration is being paid to the insinuations of emotion regulation (comprising cognitive-emotional regulation) for wellbeing.

Related to the capacity of experiencing difficult emotions is the aptitude to tolerate and control emotions. Emotion regulation is simplified by early experiences of care, kindness and warmth from an exterior source. A recent meta-analysis discover that fears of self-compassion and terrors of receiving compassion from others were considerably associated with anxiety, distress and depression (Kirby, Day, & Sagar, 2019). This recommends that self-compassion includes a complex set of affective, motivational, behavioral and cognitive processes that are consistent with how individuals narrate to others.

Moreover, in a diary study, Shiota (2006) discover that positive reappraisal and producing positive sensory measures (i.e., seeking out satisfying sights, traces, etc.) were more related with subjective wellbeing than pursuing social support and problem-solving strategies, while habitual use of interruption after a negative event was related with low wellbeing. Karademas (2007) explored that positive reappraisal and difficulty focused coping (including planning) expected higher wellbeing, whereas disaffection (e.g., trying to overlook) expected lower wellbeing. Lastly, routine use of cognitive reappraisal has been found to associate to the experience of less negative

and more optimistic affect, along with better life gratification and psychological wellbeing (Gross & John 2003; Haga, Kraft, & Corby, 2009 ; McRae, Jacobs, Ray, John, & Gross, 2012).

In a study performed on patients on dialysis, Gillanders and colleagues (2008) have found that the ability to regulate emotions was associated with less anxiety and a greater acceptance of the disease, whereas the difficulty to regulate emotions was associated with depression, somatization, and dissatisfaction with the social support received.

The role of socioeconomic aspects in occurrence of hepatitis C. is examined considerably (Yaseen, Aziz & Aftab, 2014), but psychosocial difficulties of hepatic C. patients are hardly studied. The existing experience of hepatitis is not well recognized (Dowsett, Coward, Lorenzetti, MacKean & Clement, 2017). Experiential evidence proposes that hepatic C. patients practice serious psychosocial complications (Enescu, Mitrut, BalasoIU, Turculeanu, & Enescu, 2014). Wang et al., (2018) recommends that a more combined involvement in a mixture of mental, behavioral, and social aspects is required to address the syndemic situations. Also, screening, dealing, Hepatitis C. virus related stigma, and establishing the self-esteem and support of people living with hepatitis C. are important.

In a latest research, Boscarino et al. (2015) stated that reduced physical health in patients with hepatitis C. was related with demographic factors, involving age, health insurance status, marital status, and also associated with stressful life occasions, social support or having a liver transplant.

Hepatitis C. diagnosis is described by people as having a reflective impression on their social working and wellbeing. Psychological and social factors such as social support and coping

mechanisms are not only affect in the way the subject understands and experiences symptoms, but they also effect the medical handling of the disease and modify behaviors (Bielski & Chan, 1976).

Psychosocial chronic stressors are well recognized as determinants of poor psychological and physical health, leading to a significant burden in health structures, humanity, illness, and psychological wellbeing, mainly in developed civilizations (Yarlott, Heald, & Forton, 2017). Relationship between mental, social and physical health as well as the doubts about treatment and hepatitis C. have been well documented, both in previous and in current literature (Hong et al., 2011; Kleinman et al., 2012; Armstrong et al., 2016).

Ideal medical and psychological management of hepatitis C. patients requires a multi-disciplinary approach, helpful environment and impartial health care crew (Modabbernia, Poustchi, & Malekzadeh, 2013). According to Tang (2009) social support denotes as interactions where one person enthusiastically comforts the others, talks about solutions, provides guidance, physical goods and services, and makes them realize that they are also part of a social network. Both family support and psychological wellness are significant variables in the treatment of the virus (Caress, Luker, Chalmer, & Salmon, 2009) and its prevention as they influence the person's mental condition both positively and negatively (Vermaas, 2010). Early descriptions of community support includes identifying various forms of support and assistance provided by wide range of social contacts, family members, friends, colleagues, neighbors, and others. It has also linked social assistance to thematic welfare measures. (Newsom et al., 1996; Pinqart & Sorensen 2000; Thomas, 2010). Preliminary descriptions of community support, including identifying various forms of support and assistance provided by a wide range of social contacts, family members, friends, colleagues, neighbors, and others. It has also linked social assistance to thematic welfare measures.

Another applicable element is the stigma linked with hepatitis C. that can rise anxiety and the terror of conveying the infection. This terror can be the leading source for social loneliness (Armstrong et al., 2016) and reduced closeness in relations (Younossi, Kallman, & Kincaid, 2007). Stigma can be explained by the contrast that collection of behaviors uttered through a leading crowd that perceives other person's actions as being publicly intolerable. The perception of stigma connected to disgraceful relations, and deviations from what is measured as norm, has extended past in the framework of transferrable infections, similar with the case of hepatitis C. (Bogart et al., 2008). Those actions, norms and views can develop a way to isolation from family and societal relations as well as judgment at health surroundings or the place of work. Stigmatization disturbs not only patients but also health care specialists who are not protected to labels and judgments that may affect management of disease. These concerns can encourage rise in patients' loneliness, in therapeutic stability, and a reduction in the exploration for medical assistance (Butt, 2008). Moreover, numerous studies have recommended that stigma is related with poor management of disease even in hepatitis C. patients (Treloar, Rance, & Backmund, 2013; Kamaradova et al., 2016). Applying mental approaches and intervention models (e.g., psycho-education; informational skills, motivation and behavioral skills) should be main concern.

A review demonstrates that hepatitis C. patients frequently sense labialization and unsupported in their relations and work surroundings, whereas concurrently managing with physical and mental indications. This combination focuses to parts where better learning, sympathy and patient-centered healthcare could expand the experience of patients living with hepatitis C. Treatment of hepatitis C. **needs** education efforts from extensive base, with the aim of upgrading information, and approaches about this illness. These struggles should contain patients and families, procedure choices, health-care specialists, and society as a whole. A detailed

investigation of hepatitis C related stigma, scientific, and social effects are crucial for serving patients to deal with the illness (Armstrong et al., 2016).

Social support is such important factor that contributes to the mental health of patients. Families, especially in the Pakistani social structure, are essential to the lives of individuals and are basic source of social support in improving the mental health of patients during illness. Vermaas (2010) explored that support from family has a momentous effect on relation between tension and mental wellness, and also act as shield on mental health care. Fuller-Iglesias, Webster, and Antonucci, (2015) explain the complex, growing nature of acceptance of how family cooperation can have a positive impact on life. Khan (2013) also found that there is significant relation between social support and wellbeing. Khan and Murid also explores the relationship between social cooperation and wellbeing. Social support with its notable impact on mental health, is important in determining how it can play a significant role in a person's mental health (Khan, 2003; Sood & Bakhshi, 2012; Murid, 2003). People fighting hepatitis C. can face significant economic hardship, which can lead to a reduction in their income and an increase in medical expenses. The difficulties of living with hepatitis C. for both patients and their families can be addressed through provision and awareness. Family support is a key factor in tackling these challenges. Past research has also provided evidence, as one study found that hepatitis C patients reported poor social support and high physical symptoms. About half of the patients reported being diagnosed with hepatitis C. had significantly reduced their relationships, or at least one relation. Patients also stated difficulties with their spouses, friends and family members. About one in 10 patients with this disease had lost contact with more than one person in their lifetime (Blasiolo, et al., 2006). Diagnosis of hepatitis C. has resulted in decrease in social support and wellbeing (Miller, et.all, 2012). Amodio et al. (2012) emphasized that hepatitis C virus adversely affects

patients' quality of life, leading to psychological and social catastrophe that hinders their treatment (Modabbernia et al., 2013). The response to therapy has also been linked to community support, and evidences from the literature have shown that patients with hepatitis C virus suffer from social stigma, loneliness, unemployment, poor health, refusal to antiviral therapy, and psychiatric disorders (Quarantini, et al., 2009; Blasiolo, Shinkunas, LaBrecque, Arnold, & Zickmund, (2006).

Li, Ji, and Chen, (2014) discovered that support from family usually has positive influence. Due to the absence of health associated consciousness, hepatitis C. infection has converted in most shared and life intimidating illness of the world. Pakistan is also mainly infected by this damaging illness, where patient is supposed to suffer several physical, mental as well as social challenges to deal with this infection. By quality of having hepatitis C., it disadvantaged the human lifecycle in return people lost attention, faith and hope of life. Consequently, in this serious period, they require support improving their mental wellbeing in order to cope with the illness. In this respect, family members may contribute by playing an effective role in enhancing the will power and the psychological wellness of the patients. Improved understanding about the importance of support in this revision procedure is important for those related with these patients like social workers, clinicians, family members and the community in which they live. In Pakistani civilization, family is measured necessary for support and it is generally expected that the family has a responsibility to take care for each other when required. Thus, the current investigation emphasizes on observing at how awareness of family support for hepatitis C. patients is connected with wellness.

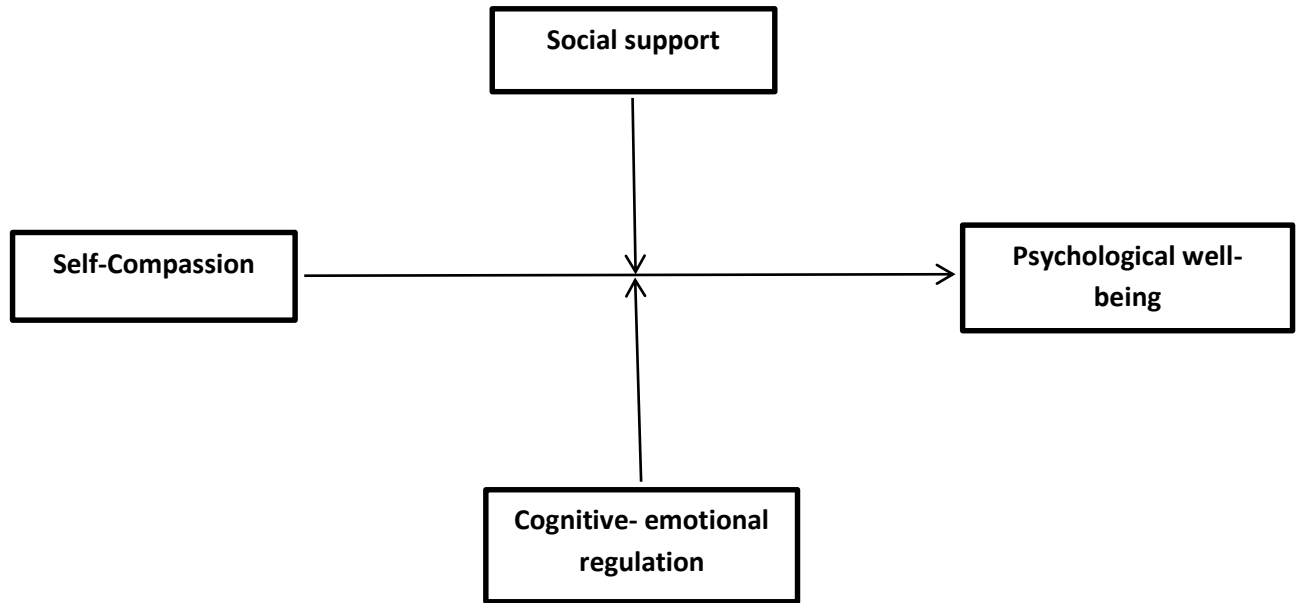
These researches highlight the requirement of full care for the patient, containing a valuation for not merely the physical condition but also the mental functioning in order to encourage the entire wellbeing of every patient. In specific, it would be beneficial throughout the

valuation phase to calculate coping abilities, self-compassion and cognitive-emotional regulation of these patients in order to endorse targeted interferences.

Considering that only few studies have been conducted on these factors associated with Hepatitis C., mental health, emotion regulation and social support are things that are very important for the healing of any kind of patients. Many researchers have pointed out that working on self-compassion strategies has a positive impact on the well-being of people, especially chronic patients but not so much work has done in the case of hepatitis C. Despite the high levels of psychopathology stated across Chronic Physical Health Conditions that could get advantage from self-compassion management. There is a significant gap in available evaluations of evidence for hepatitis C. group. There are many studies associated with stigma of hepatitis C. and self-compassion with other chronic diseases like cancer. However there is no significant work on self-compassion with hepatitis C. To our knowledge, this is one of the first study that highlight the importance of self-compassion in hepatitis c patients. **People should be aware** that psychological and individual factors along with medical treatment are important. Higher level of self-compassion and psychological well-being of a patient makes medical treatment more effective.



**Conceptual Model**



## Method

### Objectives

Following objectives have been designed for this research.

- To explore the relationship between self-compassion, cognitive emotion regulation, social support, and psychological wellbeing among patients with hepatitis C.
- To explore the impact of self-compassion on psychological wellbeing of patients with hepatitis C.
- To explore the moderating role of cognitive emotion regulation and social support in the relationship between self-compassion and wellbeing among patients with hepatitis C.

### Research Design

The research design which followed in existing study is correlational cross-sectional. It was carried out through following phases:

**Phase-I: Translation of scales.** The aim of the phase 1 in this study was to translate two scales of the present study including Self-Compassion Scale (SCS) and Multidimensional Social Support Scale (MDSS). These scales were originally developed in English and validated on western samples; that is why, it was not readily applicable on sample specified in current study. As not all patients are literate or have a good understanding of English language in Pakistani hospitals, so, it was necessary to translate SCS and MDSS into Urdu language in order to prevent the response bias. For rest of the variables, Urdu version of scales were already available and validated with Pakistani samples.

**Phase -II: Pilot study.** Study's second phase based on pilot study and was performed to establish the all study measures regarding the characteristics of psychometric and also to see the connection among tested variables.

**Phase -III: Main study.** This study purposefully aims to examine the assumptions of the research.

## Chapter III

### Phase-I: Translation of the Scales

First part comprised of the translation of Self-Compassion Scale (SCS), and Multidimensional Social Support Scale (MDSS). Self-Compassion Scale (SCS), was originally developed by Neff (2003) while MDSS was developed by Winefield, and Tiggemann in 1992. To use in the current study, both scales were translated by using the method of back translation which helps to identify the semantic similarity of translated versions. Permission was sought from authors. Procedure followed for the translation was:

- Step 1: Forward translation (English to Urdu)
- Step 2: Committee approach
- Step 3: Backward translation (Urdu to English)
- Step 4: Committee approach
- Step 5: Finalization of translated scale

**Step I: Forward translation.** In first step, scales (SCS & MDSS) were given to five bilingual experts including three college teacher, one psychologist and one MPhil research scholar and they were requested to translate English version of both scales (SCS and MDSS) into Urdu. Each of the bilingual experts translated the items independently. The purpose of this activity was to avoid grammatical errors and technical shortfalls of language.

Translators were instructed to make semantic and conceptual translation instead of literal one. They were further briefed to evade usage of jargon; terminologies that are not easily understood; Idioms or dialectal terms that ordinary people do not use in everyday life. Moreover

they were requested to pay attention on the applicability of age as well as gender and to refrain from using any terminology that could offend the target population. They were asked to point out the questions that they did not consider relevant to Pakistani culture, and to recommend the best substitute. Sequence of the items was kept in original order as of the English versions.

**Step II: Committee Approach.** After initial translation, committee reviewed and scrutinized the translations done by translators. The committee contained one psychology lecturer, one M.Phil. Scholar, supervisor of the study and the investigator herself. Committee members were independent of those who translated the scale into Urdu language. Members of the committee critically analyzed the translations and selected the one that gave the finest meaning. The committee also reviewed the translated items for conceptual equivalence, grammar as well as their background. Best items were selected from the translations with the mutual consent of all committee members.

**Stage-III: Backward translation.** Translated (Urdu) scales were translated back into English language in order to verify the accuracy of Urdu translations. The same method was used again as in the first phase and these instruments were translated back into English by independent bilingual experts including two Ph.D. and two M.Phil. Scholars. Translators were not familiar with the original version of scales. Same instructions were given to the translators as there were in the forward translation step.

**Stage-IV: Committee approach.** After completing step three, the translated questions were again referred to the committee for selection. Discrepancies were discussed again in the committee approach (two lecturer of psychology and two PhD. Scholars) and items were

reexamined if needed. Committee members examined the best translated items and verified their theoretical and semantic equality.

**Stage-V: Finalization of translated scale.** After completing all the previous steps, the scales were finalized for in order to check their psychometric strength in the pilot study.

Besides the translation of SCS and MDSS, the other two scales used in present study were CERQ (Cognitive Emotion Regulation Questionnaire) translated in Urdu by Butt, Sanam, Gulzar, and Yahya. (2013) and WHO (five) Well-being Index (1998 version) translated by Sulman Shehzad.

**Phase-II: Pilot Study****Objectives**

Phase II consisted of the following objectives:

- To determine the characteristics of psychometric for all study scales
- To explore the association among the tested variables

**Sample**

A sample of 50 patients (25 males and 25 females) of age ranged 18 and above years were selected from various private and government hospitals of Attock, Islamabad and Rawalpindi following convenient sampling technique. Only patients who had been diagnosed with Hepatitis C through HCV antibody test were approached. Patient with any other psychological or physical disease with hepatitis C. was not included.

Written approval for data collection was sought from medical superintendents of different hospitals (private & government) in both cities. Participants were informed about the objectives and procedure of research and written informed consent was obtained prior to administer the study scales. Any query of participants about research was satisfactorily answered. Verbal consent was sought from those who, for some reason, were unable to read or write and it was ensured that it does not hurt them in any way.

**Instruments**

Following instrument were used in the present research in order to assess the variables of the study.

***Self-Compassion Scale (SCS).*** Self-Compassion Scale (SCS; See Appendix-B) is a 26-item self-report scale developed by Neff in 2003. SCS consists of six sub-scales, which includes Self-Kindness (Items: 5, 12, 19, 23, 26), Self-Judgment (Items: 1, 8, 11, 16, 21), Common Humanity (Items: 3, 7, 10, 15), Isolation (Items: 4, 13, 18, 25), Mindfulness (Items: 9, 14, 17, 22) and Over-identified (Items: 2, 6, 20, 24). SCS is 5 point likert scale. Total alpha reliability for the total scale has been found as .87 in the original study (Neff, 2003).

***WHO (five) Well-being Index.*** WHO-5 (see Appendix- E) was originally designed by the World Health Organization for the assessment of well-being among diabetic patients (Bech, Gudex, & Johansen, 1996). In present study, the up-to-date version of the WHO-5 (1998) was used. WHO-5 contains five positively worded items reflecting the existence or lack of well-being. Items are ranked on a 6-point scale ranging from ‘all of the time’ (5) to ‘at no time’ (0), resulting in a maximum sum score of 25.

***Cognitive Emotion Regulation Questionnaire (CERQ).*** CERQ (see Appendix-G) is developed by Garnefski, Kraaij and Spinhoven in 2001. The original scale has 36 items in total and consists of nine subscales: Self-blame, Other-blame, Rumination, Catastrophizing, Putting into Perspective, Positive Refocusing, Positive Reappraisal, Acceptance, Planning (Garnefski, Kraaij, & Spinhoven, 2001). Short 18-item version (CERQ-short) of this scale was used in this study which was developed in 2006 (Garnefski & Kraaij, 2006).

The CERQ is designed to be a self-report questionnaire that can be administered to people aged 12 years and older as from that age, people can be considered to have cognitive capabilities to comprehend the meaning of the items. Items are measured on a 5-point Likert scale ranging from 1 ((almost) never) to 5 ((almost) always). Individual subscale scores are obtained by summing



up the scores belonging to the particular subscale (ranging from 4 to 20). The higher the subscale score, the more a specific cognitive strategy is used (Garnefski & Kraaij, 2006).

**Multi-Dimensional Support Scale (MDSS).** For the measurement of “social support” MDSS (see Appendix-I) was used. This scale is developed by Winefield, and Tiggemann in 1992. The principle of the MDSS is that the sources of support asked about, can be varied according to the situation. The first group is about the confidants (family and closest friends, i.e. attachment figures), the second group is about peers (others like the respondent, who are facing the similar challenges) and the third group is about the “experts” (those who have an official role to offer specialist help for whatever challenge it is). The items on the MDSS include emotional, practical and informational support. First group comprises 6 items, second and third group comprises 5 items. Responses are never, sometimes, often, usually or always; scored 1-4 (Winefield, Winefield, & Tiggemann, 1992).

The MDSS can be used with several different samples, including mature-aged university students, cancer patients, earthquake victims, hospital patients recovering from surgery, mothers receiving help from a child protection agency, and people caring for a relative who suffers from schizophrenia (Winefield, Winefield, & Tiggemann, 1992).

***Consent form and demographic sheet.*** The consent form was attached to the scales with applicable demographic sheet for obtaining participants' consent and their basic information. The information comprised age, gender, marital status, family system and area.

## Procedure

The participants were contacted after the official permission of the head of the psychology department (NUML, Islamabad, Pakistan) and the concerned authorities of the hospitals. Prior to the investigation, the officials were briefed about the research's nature, objectives and estimated duration of data collection. After acquiring the ethical approval of the concerned authorities the hospitals, participants signed an informed consent (with demographic information). In addition, special attention was paid to the ethics of study. Participants had full right to withdraw from the study at any point. Participants were pledged of right to privacy and the confidentiality of their info and were guaranteed that their info would be reserved completely private and would be used only for this study. The investigator contacted every member independently and give them a brief overview to the nature and purpose of the study. Initially, patients were examined as we only required those patients who had diagnosed hepatitis C. After their examination, a booklet containing measurements [Self-compassion scale (SCS), WHO (five) well-being index, Cognitive emotion regulation questionnaire (CERQ) and Multidimensional Support scale (MDSS)] was handed over to the participants to fill up. Verbal information was sought by the researcher on each question from the participants who were unable to read and write for any reason. Instruments were administered individually and each individual took almost 30-40 minutes to complete the questionnaires. Because of the clinical nature of the sample and length of the measures, data was collected in two consecutive days in order to avoid response bias relating to fatigue or boredom.

## **Results**

This part of the research describes the findings of pilot study, containing psychometrics (i.e., alpha reliability, item-total correlations) and inter-scale correlations for all study variables.

Results of the pilot study are shown in the following tables.

**Table 1***Inter-scale correlation, alpha coefficients, and descriptive statistics of the study variables (N=50)*

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
SK	1	-.86**	.93**	-.89**	.94**	-.93**	.83**	-.37**	.13	-.57**	.43**	-.85**	-.79**	.93**	.62**	.80**	.88**	.56**	.70**
SJ		1	-.83**	.85**	-.87**	.89**	-.77**	.27	-.24	.64**	-.42**	.83**	.71**	-.85**	-.51**	-.61**	-.83**	-.45**	-.58**
CH			1	-.94**	.88**	-.89**	.79**	-.45**	.06	-.60**	.44**	-.84**	-.74**	.91**	.58**	.74**	.82**	.49**	.71**
IS				1	-.89**	.89**	-.81**	.44**	-.12	.62**	-.43**	.84**	.72**	-.87**	-.58**	-.78**	-.76**	-.48**	-.73**
MF					1	-.95**	.81**	-.38**	.15	-.59**	.38**	-.91**	-.87**	.93**	.67**	.74**	.88**	.66**	.75**
OI						1	-.78**	.38**	-.19	.63**	-.37**	.86**	.82**	-.95**	-.67**	-.70**	-.86**	-.54**	-.73**
SSA							1	-.30*	.25	-.53**	.40**	-.71**	-.60**	.80**	.45**	.63**	.76**	.44**	.52**
SSB								1	.19	.21	-.19	.30*	.32*	-.43**	-.21	-.20	-.25	.08	-.58**
SSC									1	-.12	-.02	-.06	-.08	.13	.09	.11	.28*	.12	-.15
SB										1	-.64**	.58**	.55**	-.58**	-.49**	-.52**	-.58**	-.32*	-.57**
OB											1	-.39**	-.34*	.36**	.32*	.41**	.33*	.09	.36*
RM												1	.89**	-.77**	-.69**	-.71**	-.85**	-.62**	-.69**
CT													1	-.74**	-.68**	-.76**	-.79**	-.65**	-.72**

PIP																				1	.55**	.66**	.82**	.54**	.71**
PRF																					1	.59**	.60**	.60**	.67**
PRA																						1	.61**	.60**	.70**
AT																							1	.51**	.50**
PN																								1	.58**
WHO																									1

$\alpha$	.93	.64	.90	.90	.96	.94	.95	.91	.96	.96	.88	.71	.49	.76	.85	.81	.88	.92	.92
M	10.48	18.54	8.90	15.04	8.34	17.22	9.80	9.32	8.68	7.48	4.50	9.08	8.66	3.90	2.76	5.34	4.90	6.28	10.06
SD	4.39	3.44	4.02	4.04	4.49	4.06	4.12	2.18	3.19	2.13	1.74	1.38	1.69	1.56	1.02	2.14	2.36	2.14	4.75
Skew	1.13	-1.07	1.02	-.72	1.27	-1.51	1.01	.88	.34	-.82	1.11	-1.45	-.97	1.52	1.10	.29	1.00	.02	.04

\*\* $p < .001$ , .01, \* $p < .05$ , Non-significant =  $p > .05$

Note: SK= self-kindness; SJ= self-judgment; CM= common humanity; IS= isolation; MF= mindfulness; OI= over-identified; SSA= the confidants/family (group A); SSB= peers (group B); SSC= experts (official help providers/supervisors – group C); SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning; WHO= WHO (five) well-being index

Table 1 shows inter-scale correlation, alpha coefficients, means, standard deviations, skewness and kurtosis for Self-compassion scale, well-being index, cognitive emotion regulation questionnaire and multidimensional support scale. Findings indicate that almost all the variables are significantly correlated with each other except SSC (social support from experts or supervisors). All the study scales and their subscales have high alpha reliabilities as per desired direction while the values of skewness and kurtosis show that data is normally distributed.

**Table 2**

*Item-total Correlation of the Self-compassion scale's sub-scales (N=50)*

Item	Total	Corrected	Item	Total	Corrected	Item	Total	Corrected
<b>SK</b>			<b>SJ</b>			<b>CM</b>		
5	.66**	.85	1	.42**	.13	3	.70**	.53
12	.69**	.87	8	.85**	.68	7	.93**	.88
19	.73**	.84	11	.37**	.08	10	.94**	.89
23	.64**	.77	16	.74**	.58	15	.93**	.87
26	.51**	.81	21	.78**	.62			
<b>IS</b>			<b>MF</b>			<b>OI</b>		
4	.77**	.59	9	.95**	.92	2	.89**	.82
13	.92**	.85	14	.97**	.94	6	.91**	.83
18	.93**	.87	17	.95**	.92	20	.93**	.87
25	.89**	.80	22	.93**	.88	24	.96**	.94

\*\* $p < .001$

Note: SK= self-kindness; SJ= self-judgment; CM= common humanity; IS= isolation; MF= mindfulness; OI= over-identified

Table 2 shows that Self-compassion Scale (SCS) is an internally consistent measure of self-compassion. All items are significantly correlated with their total scale. Positive correlation indicated that all items contributed in assessment of self-compassion, and they are internally consistent.

**Table 3**

*Item-total Correlation of the WHO (five) well-being index's sub-scales (N=50)*

Item	Total	Corrected
	WHO	
1	.90**	.85
2	.91**	.89
3	.92**	.88
4	.86**	.90
5	.76**	.92

\*\* $p < .001$

Note: WHO= WHO (five) well-being index

Table 3 shows that WHO (five) well-being index is an internally consistent measure of psychological well-being. All items have shown significant correlation with their total scale. Their positive correlation proposed the contribution of all items in the assessment of psychological wellbeing. Outcomes showed that items are internally consistent.

**Table 4**

*Item-total Correlation of the Cognitive-emotion regulation questionnaire's sub-scales (N=50)*

Item	Total	Corrected	Item	Total	Corrected	Item	Total	Corrected
	<b>SB</b>			<b>OB</b>			<b>RM</b>	
4	.98**	.92	10	.94**	.80	2	.90**	.82
14	.97**	.92	18	.96**	.80	6	.98**	.82
	<b>CT</b>			<b>PIP</b>			<b>PRF</b>	
9	.72**	.35	13	.89**	.61	7	.92**	.75
17	.90**	.35	16	.90**	.61	11	.94**	.75
	<b>PRA</b>			<b>AT</b>			<b>PN</b>	
3	.91**	.68	1	.94**	.80	12	.96**	.85
8	.92**	.68	5	.95**	.80	15	.96**	.85

\*\* $p < .001$

Note: SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning

Table 4 illustrates that Cognitive-emotion regulation questionnaire (CERQ) is an internally consistent measure of cognitive-emotion regulation. All items are significantly correlated

with their total scale. Positive correlation indicated that all items contributed in assessment of self-compassion, and they are internally consistent.

**Table 5**

*Item-total Correlation of the Multidimensional support scale's sub-scales (N=50)*

Item	Total	Corrected	Item	Total	Corrected	Item	Total	Corrected
	<b>SSA</b>			<b>SSB</b>			<b>SSC</b>	
1	.94**	.92	1	.83**	.76	1	.99**	.94
2	.93**	.89	2	.90**	.82	2	.99**	.94
3	.90**	.85	3	.88**	.82	3	.91**	.84
4	.84**	.77	4	.88**	.83	4	.90**	.96
5	.89**	.85	5	.88**	.78	5	.73**	.77
6	.93**	.90						

\*\* $p < .001$

Note: SSA= the confidants/family (group A); SSB= peers (group B); SSC= experts (official help providers/supervisors – group C)

Table 5 indicates that Multidimensional Support scale (MDSS) is internally consistent measure of social support. All items are significantly correlated with their total scale. Positive correlation indicated that all items contributed in assessment of self-compassion, and they are internally consistent.

## Discussion

Pilot study was aimed to determine the psychometric characteristics of all study measures (i.e., self-compassion scale, cognitive-emotional regulation questionnaire, multidimensional social support scale, WHO (five) wellbeing index). Pilot study also explored the relationships between self-compassion, cognitive-emotional regulation, social support and psychological wellbeing.

First, psychometric properties of all study measures were established on pilot study sample ( $N = 50$ ). Sample was collected from different hospitals of Rawalpindi, Islamabad and Attock. Findings (see table 1) represented that almost all the scales (self-kindness, common humanity,



mindfulness, self-judgment, isolation, over-identified, social support from family, social support from peers, self-blame, rumination, blaming others, catastrophizing, positive refocusing, putting into perspective, positive reappraisal, acceptance, planning) are significantly correlated with each other except social support from supervisors. Scales were internally consistent and normally distributed as per desired direction (see table 2, 3, 4 & 5). Outcomes of the pilot study confronts the relationship between self-compassion, cognitive-emotional regulation, social support and psychological wellbeing. Previous studies also explored these phenomenon.

Hepatitis C. patients are at greater risk for mental health concerns compared with people in general population. Adinolfi and his fellows published a review in august 2017, noted that one third of the hepatitis C. patients suffered from depression. Some people also face mood changes, irritation, anxiety, loneliness, sleep problems, psychosis etc. (Hughes, Bassi, Gilbody, Bland, & Martin, 2016). Plenty of emotional and psychosocial stressors contributes in low psychological wellbeing as well (El-Kader, Al-Jiffri, & Al-Shreef, 2014). Mental health management is essential in these cases.

When people go through from such prolong diseases like hepatitis C. they ignore other joys of life in this grief. It may be a big shock in itself to be associated with such illness. Psychological well-being also explains the unremitting emotional and cognitive evaluation of personal traits that helps to experience life gratification, satisfying emotions, and low levels of negative feelings (Yazdani, et al., 2018).

### Phase-III: Main Study

This phase was intended to examine the effect of self-compassion on Hepatitis C. patients' psychological well-being and investigating the moderating role of cognitive-emotion regulation and social support. Main study claimed to meet the following objectives:

#### Objectives

- To find out the relationship between self-compassion, psychological well-being, cognitive-emotional regulation (CER) and social support.
- To study the effect of self-compassion, Social Support, and CER on psychological well-being of Hepatitis C patients.
- To study the moderating role of CER and social support in the relationship between self-compassion and psychological wellbeing among patients of Hepatitis C.
- To study the role of demographics (e.g. age, gender, family system, marital status) on all the study variables.

#### Hypotheses

- H1:** Self-supporting domains of self-compassion (i.e., self-kindness, common humanity, and mindfulness) have positive correlation with psychological wellbeing and social support among patients with hepatitis C.
- H2:** Self-negating domains of self-compassion (i.e., self-judgment, isolation, and over-identified) have negative relationship with psychological wellbeing and social support among patients with hepatitis C.

- H3:** Positive domains of CER (i.e., positive refocusing, positive reappraisal, putting into perspective, acceptance, and planning) positively correlates with self-supporting domains of self-compassion, psychological well-being and social support.
- H4:** Negative domains of CER (i.e., self-blame, other-blame, rumination, and catastrophizing) negatively correlates with self-supporting domains of self-compassion, psychological well-being and social support.
- H5:** Self-supporting domains of self-compassion (i.e., self-kindness, common humanity, and mindfulness) increase psychological wellbeing among patients with hepatitis C.
- H6:** Self-negating domains of self-compassion (i.e., self-judgment, isolation, and over-identified) decrease psychological wellbeing among patients with hepatitis C.
- H7:** Positive domains of CER (i.e., positive refocusing, positive reappraisal, putting into perspective, acceptance, and planning) increase Psychological well-being among patients with hepatitis C.
- H8:** Negative domains of CER (i.e., self-blame, other-blame, rumination, and catastrophizing) decrease Psychological well-being among patients with hepatitis C.
- H9:** Positive domains of CER boost the impact of self-protecting self-compassion on psychological wellbeing among patients with hepatitis C.
- H10:** Negative domains of CER weaken the impact of self-protecting self-compassion on psychological wellbeing among patients with hepatitis C.
- H11:** Positive domains of CER decrease the impact of self-negating self-compassion on psychological wellbeing among patients with hepatitis C.

**H12:** Negative domains of CER increase the impact of self-negating self-compassion on psychological wellbeing among patients with hepatitis C.

**H13:** Social support boosts the impact of self-protecting self-compassion on psychological wellbeing among patients with hepatitis C.

**H14:** Social support buffer the impact of self-negating self-compassion on psychological wellbeing among patients with hepatitis C.

### **Study Design**

The research was a Cross-sectional Correlational designed in order to explore the relationship between self-compassion, psychological wellbeing, cognitive-emotional regulation and social support among patients with Hepatitis C. It has been designed in such a manner that moderating role of Cognitive emotional regulation and social support on the relationship between self-compassion and psychological wellbeing, among patients with hepatitis C. can also be explored.

### **Sample**

The population targeted for this study was patients of hepatitis C. from Hospitals of Attock, Rawalpindi & Islamabad (Pakistan) with age range 18 years and above. The sample was recruited from both public and private hospitals through convenient sampling technique. The sample size for the main study was comprise of 260 (both males and females) patients of hepatitis C. Patients with any other psychological or physical disease with hepatitis C. were not included. Written approval for data collection was sought from medical superintendents of different hospitals (private & government) in both cities. Participants were informed about the objectives and procedure of research and written informed consent was obtained prior to administer the study scales. Any query

of participants about research was satisfactorily answered. Verbal consent was sought from those who, for some reason, were unable to read or write and it was ensured that it does not hurt them in any way.

## Research Instrument

The same tools used in the pilot study were approached to test the assumptions of the main study. The details of questionnaire regarding variables, dimensions, sources and items are shown in Table 6.

Sr No.	Instruments	Sub-scales	No. of Items	Reverse scored items	Likert Scale
1	<b>Self-Compassion Scale (SCS; Kristin Neff , 2003)</b>	1) Self-Kindness 2) Self-Judgment 3) Common Humanity 4) Isolation 5) Mindfulness 6) Over-identified	26-items	-	5 point (1-5)
2	<b>WHO (five) Well-being Index (WHO; 1998)</b>		5 – items	-	6 point (0-5)
3	<b>Cognitive Emotion Regulation Questionnaire (short version) (CERQ; Nadia , Vivian 2006)</b>	1) Self-blame 2) Other-blame 3) Rumination 4) Catastrophizing 5) Putting into Perspective 6) Positive Refocusing 7) Positive Reappraisal 8) Acceptance 9) Planning	18-items	-	5 point (1-5)
4	<b>Multi-Dimensional Support Scale (MDSS; Winefield, and Tiggemann, 1992 )</b>	Three Groups: • the confidants • peers • Experts (official help provider)	16-items	-	3 point (1-3)

## Procedure

In this study, we examined data from 260 patients of Hepatitis C. from different cities of Pakistan (i.e., Islamabad, Rawalpindi, and Attock). About 300 patients were contacted out of which 275 patients (both male, female) agreed to participate in the research and give us information about their disease. Researcher had to remove the data of 15 people because they provided incomplete information that was of no use and could adversely affect the results of the study. Data collection was started with the agreement of relevant authorities of the hospitals. Inclusion criteria for study was that the participants should be in the age range of 18 years or above and diagnosed with Hepatitis C through HCV antibody test at the time of data collection. In addition, those patients were approached who were in hospital at the time of data collection (only outdoor patients). Those patients were not included who had any other psychical or psychological disease other than Hepatitis C. Participants first read and signed an informed consent form. Their agreement to participate in the study included the guarantee of their privacy, confidentiality and right of resigning the investigation at any place. The booklet which was given to the participants to fill out was arranged in a way that they first completed a demographic information sheet then questionnaires.

**Table 7**

*Frequencies and Percentages of Demographic Characteristics of the Sample (N = 260)*

Variables		Frequencies	Percentages
Gender	Male	131	50.4 %
	Female	129	49.6 %
Family system	Nuclear	127	48.8 %
	Joint	133	51.2 %
Age	18 – 27	41	15.8 %
	28 – 37	113	43.5 %
	38 – 47	41	15.9 %
	48 – 57	18	7 %

	58 – 67	29	11.2 %
	68 – 77	18	7 %
Marital status	Unmarried	85	32.7 %
	Married	134	51.5 %
	Other	41	15.8 %

## Results

This part grasps the outcomes of main study analysis concerning testing of hypothesis. Main study intended to inspect the influence of self-compassion (self-kindness, self-judgment, common humanity, isolation, mindfulness, over-identified), and psychological well-being on hepatitis C. patients. Current study also proposed to observe moderating influence of social support (family, peers, supervisors/official help providers) and cognitive-emotional regulation (self-blame, other-blame, rumination, catastrophizing, putting into perspective, positive refocusing, positive reappraisal, acceptance, planning) in the relationship between self-compassion and psychological well-being of Hepatitis C. patients. To achieve the above-mentioned objectives and to test assumptions of the current research (i.e. main study), reliabilities, inter-scale correlation, regression analyses and moderation analyses were conceded in this portion as well. Results are as follow:

**Table 8**

*Inter-scale correlation, reliabilities estimates and descriptive statistics of self-compassion, psychological well-being, social support and cognitive emotional regulation (N=260)*

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
SK	1	-.45**	.49**	-.46**	.58**	-.57**	.49**	.15*	.16*	-.72**	-.75**	-.68**	-.67**	.64**	.66**	.64**	.50**	.36**	.46**
SJ		1	-.83**	.74**	-.82**	.86**	-.83**	-.31**	-.20**	.52**	.50**	.59**	.49**	-.45**	-.48**	-.41**	-.68**	-.66**	-.47**
CH			1	-.89**	.89**	-.87**	.87**	.20**	.25**	-.46**	-.49**	-.53**	-.45**	.52**	.55**	.47**	.70**	.74**	.56**
IS				1	-.83**	.84**	-.79**	-.13*	-.24**	.42**	.45**	.46**	.37**	-.45**	-.48**	-.42**	-.58**	-.64**	-.45**
MF					1	-.93**	.86**	.16**	.29**	-.51**	-.54**	-.59**	-.52**	.58**	.62**	.54**	.85**	.75**	.52**
OI						1	-.82**	-.14*	-.30**	.52**	.54**	.60**	.50**	-.54**	-.58**	-.51**	-.81**	-.65**	-.49**
SSA							1	.23**	.32**	-.57**	-.55**	-.59**	-.50**	.57**	.58**	.51**	.68**	.68**	.47**
SSB								1	.33**	-.13*	-.15*	-.11	-.09	.13*	.20**	.12*	.14*	.22**	.18**
SSC									1	-.05	-.12*	-.14*	-.11	.26**	.29**	.28**	.36**	.21**	.10*
SB										1	.91**	.85**	.84**	-.67**	-.69**	-.66**	-.42**	-.46**	-.37**
OB											1	.85**	.85**	-.75**	-.75**	-.73**	-.47**	-.45**	-.47**
RM												1	.92**	-.72**	-.73**	-.71**	-.54**	-.54**	-.43**
CT													1	-.71**	-.72**	-.69**	-.46**	-.51**	-.40**



PIP																				1	.925**	.93**	.54**	.44**	.48**
PRF																					1	.88**	.56**	.53**	.52**
PRA																						1	.527**	.40**	.43**
AT																							1	.56**	.37**
PN																								1	.48**
WHO																									1

$\alpha$	.94	.83	.96	.84	.92	.86	.94	.86	.91	.93	.93	.51	.42	.62	.78	.79	.89	.88	.90
M	8.85	18.82	8.69	14.90	8.05	17.53	9.22	8.65	6.93	7.26	5.80	9.37	9.22	3.65	2.78	4.99	4.77	5.47	9.98
SD	3.00	3.52	3.13	3.98	3.43	2.81	3.71	1.96	2.31	2.22	2.41	1.22	1.36	1.38	1.11	1.68	1.81	1.92	3.81
Skew	.75	-1.37	1.12	-.48	1.42	-1.74	1.21	-.17	1.24	-.61	-.02	-1.90	-1.83	1.44	1.27	1.09	1.37	.77	.31

\*\* $p < .001$ , .01, \* $p < .05$ , Non-significant =  $p > .05$

Note: SK= self-kindness; SJ= self-judgment; CM= common humanity; IS= isolation; MF= mindfulness; OI= over-identified; SSA= the confidants/family (group A); SSB= peers (group B); SSC= experts (official help providers/supervisors – group C); SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning; WHO= WHO (five) well-being index

Correlations among the main study variables are shown in table 8. As **predicted**, the positive dimensions of self-compassion (self-kindness, common humanity, mindfulness) are highly positive correlated with psychological well-being at  $p < .001$ . Similarly, negative dimensions of self-compassion (self-judgment, isolation, over-identified) are highly negative correlated with psychological well-being.

On the other hand social support from family is highly correlated with psychological well-being while social support from peers and official help providers (supervisors) is moderately correlated with psychological well-being. Moreover, all the sub scales of CERQ are highly correlated with psychological wellbeing and self-compassion which was also expected from previous literature.

Table also demonstrates reliability estimates and descriptive measurements for study variables. Figures propose that all reliability estimates for all the study measures are in desired direction, showing the good internal consistency of scales. Skewness and kurtosis results are also in adequate range showing the confirmation of normally distributed data.

### **Predictive Role of Study Variables for Psychological Well-being**

To examine the impact of study variables on psychological well-being of Hepatitis C. patients, regression analysis were calculated via 'Enter Method Approach'. Pallant (2011) favored this mode since it computes the combined effect of all independent variables on dependent variable, additionally assesses the single predictive influence of every independent variable. While current study intended to discover the predictive impacts of the research variables on psychological well-being thus it was more important to compute predictive analysis individually.

Following table illustrate the results of regression analysis on Psychological well-being by self-compassion, cognitive-emotion regulation and social support (N=260).

**Table 9**

*Multiple regression Analysis on Psychological well-being by self-compassion, cognitive-emotion regulation and social support (N=260).*

Variables	Psychological well-being				
	B	SE B	B	95% CI	
				LL	UL
SK	.25	.06	.26**	.6	.45
SJ	-.08	.08	-.07	-.25	.08
CM	.69	.10	.75**	.49	.89
IS	-.23	.08	-.25**	-.40	-.07
MF	.34	.13	.31**	.08	.60
OI	-.06	.10	-.05*	-.14	-.26
R=.61, R <sup>2</sup> =.38, ΔR <sup>2</sup> =.37, F(6,253)=25.78**					
SB	-.17	.06	-.10**	-.30	-.05
OB	-.23	.06	-.14**	-.35	-.10
RM	-1.59	.34	-.51**	-2.28	-.91
CT	-.62	.23	-.22**	-1.07	-.12
PIP	1.10	.14	.39**	.80	1.39
PRF	.15	.16	.04	.10	.47
PRA	.70	.15	.31**	.39	1.01
AT	.54	.16	.25**	.15	.85
PN	.20	.12	.17	.03	.43
R=.85, R <sup>2</sup> =.73, ΔR <sup>2</sup> =.72, F(9,250)=75.65**					
SS A	.72	.05	.70**	.62	.82
SS B	.02	.09	.01	-.20	.17

SS C	.18	.08	.11*	.10	.25
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R=.67, R<sup>2</sup>=.46,  $\Delta R^2$ =.44, F(3, 256)=71.24\*\*

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\*\* $p < .001$ , .01, \* $p < .05$ , Non-significant =  $p > .05$

*Note:* SK= self-kindness; SJ= self-judgment; CM= common humanity; IS= isolation; MF= mindfulness; OI= over-identified; SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning; SSA= the confidants/family (group A); SSB= peers (group B); SSC= experts (official help providers/supervisors – group C); WHO= WHO (five) well-being index

Results in Table 9 show that effect of self-compassion, cognitive-emotional regulation and social support on psychological wellbeing of hepatitis C. patients. Findings reveal that to predict psychological wellbeing among hepatitis C. patients, the self-compassion domains mutually explained 38% of variance with significant F ratio ( $\Delta R^2 = .37$ ,  $F = 25.78$ ,  $p < .001$ ). Though measuring separately by beta weights self-kindness, common humanity and mindfulness appeared as the significant positive predictors whereas isolation and over-identified appeared as the significant negative predictors of psychological wellbeing. Beta values direct that increasing self-kindness, common humanity and mindfulness by one unit increase psychological well-being by .25 units ( $B = .25$ ,  $\beta = .26$ ,  $p < .001$ ), .69 units ( $B = .69$ ,  $\beta = .75$ ,  $p < .001$ ) and .34 units ( $B = .34$ ,  $\beta = .31$ ,  $p < .001$ ) respectively. Nonetheless, self-judgment did not display any significant impact on psychological wellbeing.

Value of delta R<sup>2</sup> demonstrates that the cognitive-emotional regulation explained 72% of variance to predict psychological wellbeing among patients with hepatitis C. ( $\Delta R^2=.72$ ,  $F = 75.65$ ,  $p < .001$ ). Beta weights reflect that putting into perspective, positive reappraisal and acceptance were significant positive predictors of psychological well-being among patients with hepatitis C. suggesting that one unit increases in putting into perspective, positive reappraisal and acceptance increase psychological well-being by 1.10 units ( $B = 1.10$ ,  $\beta = .39$ ,  $p < .001$ ), .70 units ( $B = .70$ ,  $\beta = .31$ ,  $p < .001$ ), and .54 units ( $B = .54$ ,  $\beta = .25$ ,  $p < .001$ ) respectively. Self-blame, Other-blame,

rumination and catastrophizing, were strong negative predictors of psychological well-being. Values disclose that one unit increases in self-blame, other-blame, rumination and catastrophizing decrease patients' psychological well-being by  $-.17$  ( $B = -.17, \beta = -.10, p < .001$ ),  $-.23$  ( $B = -.23, \beta = -.14, p < .001$ ),  $-1.59$  ( $B = -1.59, \beta = -.51, p < .001$ ) and  $-.62$  ( $B = -.62, \beta = -.22, p < .001$ ) units respectively. Though, positive refocusing and planning have not produced any significant influence on psychological wellbeing among patients with hepatitis C.

Results show that groups of social support mutually accounted for 46% of variance ( $\Delta R^2 = .46, F = 71.24, p < .001$ ) in predicting psychological wellbeing among patients with hepatitis C. While interpreting individually, support of confidants significantly increased while support of experts (official help providers) decreased the level of psychological well-being among patients with hepatitis C. Beta results direct that increasing one unit in support of confidants boosted psychological wellbeing by  $.72$  units ( $B = .72, \beta = .70, p < .001$ ) while rising one unit in support of experts (official help providers) decreased psychological well-being by  $.18$  units ( $B = -.18, \beta = -.11, p < .05$ ). Support of peers did show significant effect on psychological well-being.

### **Moderation Analysis**

Moderating role of social support (family, peers, official help providers/supervisors) and cognitive-emotional regulation (self-blame, other-blame, rumination, catastrophizing, putting into perspective, positive refocusing, positive reappraisal, acceptance, planning) was inspected in order to explain the relationship between self-compassion and psychological well-being of Hepatitis C patients. Moderation of cognitive-emotional regulation and social support was verified by Macro Process Analysis which is offered by Hayes (2013). Process is actually a computational technique for examining the path models like mediation, moderation and their combinations.

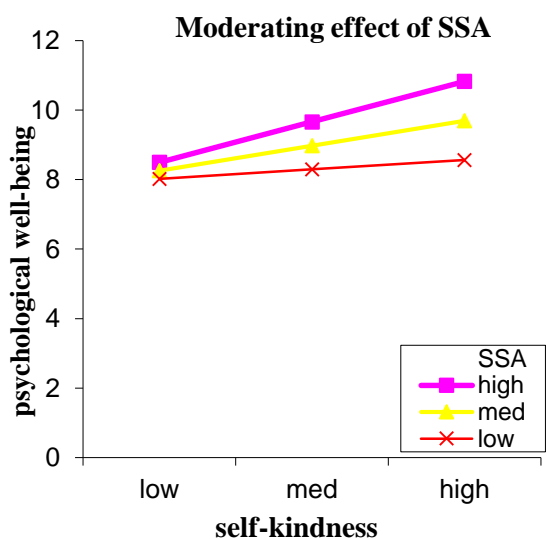
**Table 10**

*Moderating effect of Social support on self-kindness among hepatitis C. patients (N=260)*

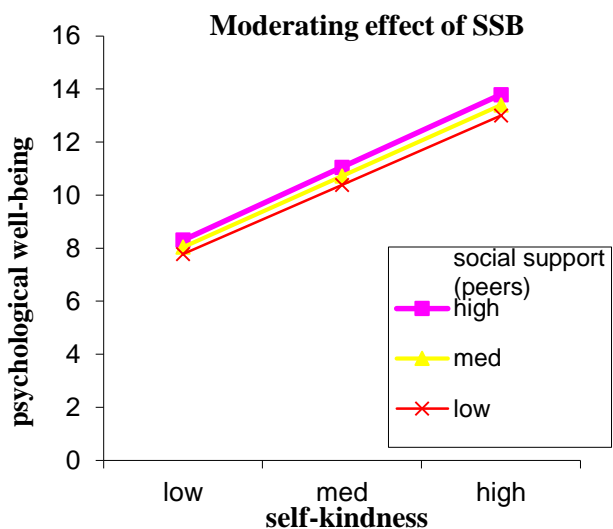
Variables	Psychological well-being				
	<i>B</i>	<i>SE B</i>	<i>T</i>	<i>P</i>	95% CI
Constant	8.44	1.35	6.27	.00	[5.79, 11.09]
SK	.14	.14	.95	.34	[-.14, .41]
SSA	.18	.14	1.28	.20	[-.09, .46]
SK x SSA	.04	.01	3.32	.001	[-.02, .07]
R <sup>2</sup>	.32				
F	40.82			.00	
Constant	8.64	2.37	3.65	.00	[3.98, 13.30]
SK	.11	.27	.42	.68	[-.41, .63]
SSB	.36	.27	-1.36	.17	[-.16, .89]
SK x SSB	.06	.03	2.11	.04	[-.004, .12]
R <sup>2</sup>	.24				
F	26.87			.00	
Constant	10.89	1.73	6.31	.00	[7.48, 14.28]
SK	.16	.18	.93	.35	[-.18, .51]
SSC	.70	.22	3.26	.001	[-.28, .1.13]
SK x SSC	.08	.02	3.65	.00	[-.04, .12]
R <sup>2</sup>	.25				
F	28.99			.00	

p>.05= Non-significant, \*\*\*p < .001

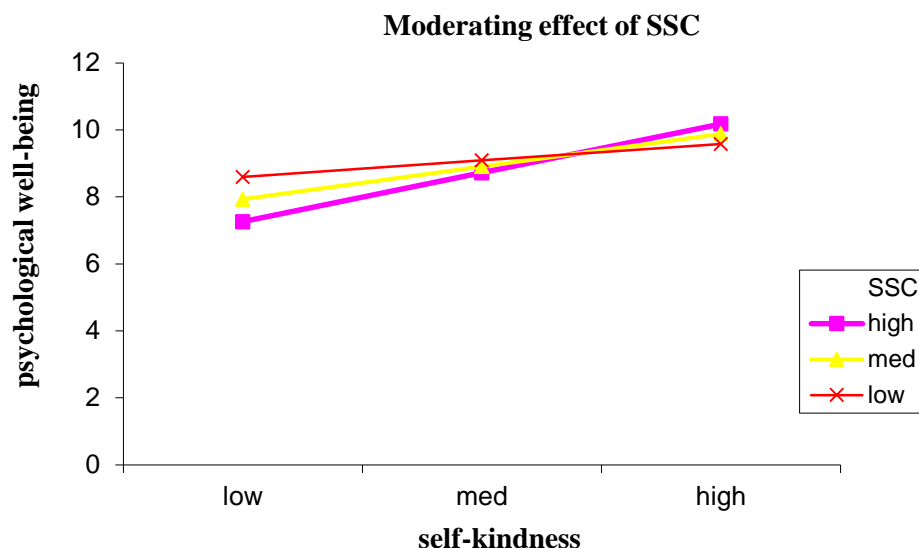
*Note:* SK= self-kindness, SSA= the confidants/ family (group A), SSB= peers (group B), SSC= experts (official help providers/ supervisors – group C), WHO= WHO (five) well-being index



*Figure 1.* Moderating effect of SSA (social support-family) in predicting psychological well-being among Hepatitis C. patients



*Figure 2.* Moderating effect of SSB (social support-peers) in predicting psychological well-being among Hepatitis C. patients



*Figure 3.* Moderating effect of SSC (social support-official help providers/ supervisors) in predicting psychological well-being among Hepatitis C. patients

Results obtained in Table (10) exhibit the moderating role of social support (i.e. family, peers, official help providers/ supervisors) in the association between self-kindness and psychological well-being among hepatitis C. patients. Model 1 demonstrates the interaction effect of social support (family) and self-kindness on psychological well-being among hepatitis C. patients. Findings suggest that social support (family) and self-kindness interactively produced 32% ( $F = 40.82$ ,  $R^2 = .32$ ,  $p < .001$ ) of variance in clarifying psychological wellbeing. As a shielding factor, social support (family) had straight effect by boosting the impact of self-kindness on psychological well-being among hepatitis C. patients. The following graph (see figure 1) further illuminates this connection at high, medium and low levels of social support (family). The graph expresses that high, medium and low social support (family) augmented the effect of self-kindness on psychological well-being.

Model 2 demonstrates outcomes for the moderating impact of social support (peers). The interaction term exposed significant interaction impact ( $B = .06$ ,  $R^2 = .24$ ,  $F = 26.87$ ,  $p < .001$ ) of

social support (peers) and self-kindness. Mod graph (see figure 2) further describes that social support (peers) assisted as a protective factor and boosted the impact of self-kindness on psychological well-being among hepatitis C. patients. The graph further illustrates that all levels of social support (peers) maximized the effect of self-kindness on psychological well-being.

Model 3 shows the results for the moderating effect of social support (official help providers/ supervisors). Values revealed a significant interaction effect ( $R^2 = .25$ ,  $F = 28.99$ ,  $p < .001$ ) of social support (official help providers/ supervisors) and self-kindness explaining 25% of variance in the level of psychological well-being among hepatitis C. patients. Mod graph (see figure 3) further explains this impact by representing that high, medium and low levels of social support (official help providers/ supervisors) raised this effect of self-kindness on psychological well-being.

**Table 11**

*Moderating effect of Cognitive emotion regulation on self-kindness among hepatitis C. patients (N=260)*

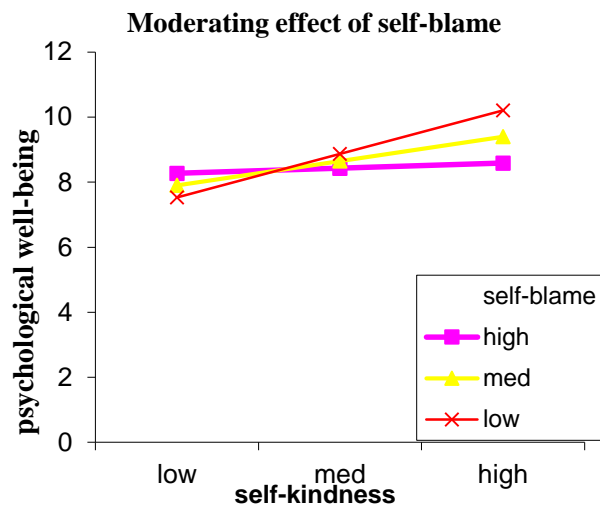
Variables	Psychological well-being				
	B	SE B	t	P	95% CI
Constant	-.13	2.23	-.06	.95	[-4.53, 4.26]
SK	1.10	.17	6.18	.00	[.75, 1.46]
SB	-.85	.25	-3.28	.001	[-.34, 1.36]
SK x SB	-.10	.02	-4.41	.00	[-.16, -.06]
R <sup>2</sup>	.91				
F	34.71			.00	
Constant	5.74	2.65	2.16	.03	[.51, 10.97]
SK	.75	.19	3.84	.00	[.37, 1.14]
OB	-.22	.31	-.71	.48	[-.39, .84]
SK x OB	-.08	.03	-2.91	.004	[-.13, .02]
R <sup>2</sup>	.28				
F	32.70			.00	
Constant	2.39	2.35	1.02	.31	[-2.23, 7.01]
SK	.93	.18	5.08	.00	[.57, 1.29]
RM	-.53	.26	-2.05	.04	[-.02, 1.04]
SK x RM	-.08	.02	-3.66	.00	[-.04, .13]
R <sup>2</sup>	.28				
F	32.67			.000	
Constant	-.002	2.36	-.001	.99	[-4.66, 4.66]
SK	1.15	.19	5.99	.00	[.77, 1.53]



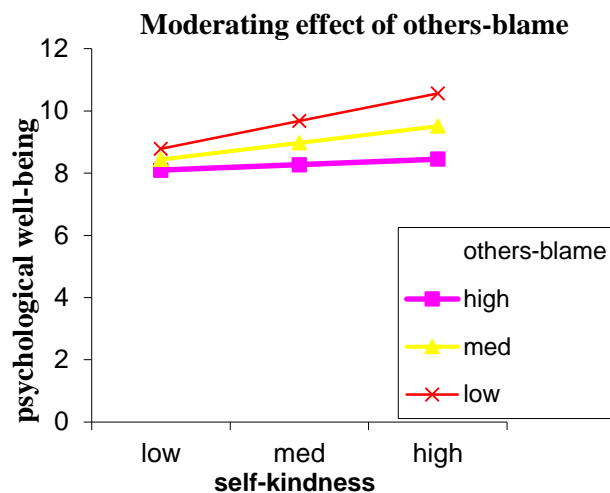
CT		-0.82	.26	-3.08	.002	[-.29, 1.35]
SK x CT		-.11	.02	-4.54	.00	[-.06, .16]
R <sup>2</sup>	.29					
F	34.50				.00	
Constant		6.24	1.29	4.81	.00	[3.68, 8.80]
SK		.14	.12	1.11	.27	[-.10, .37]
PIP		.24	.39	.62	.54	[-.52, 1.00]
SK x PIP		.03	.03	1.10	.27	[-.02, .09]
R <sup>2</sup>	.29					
F	32.99				.00	
Constant		7.37	1.23	5.99	.00	[4.94, 9.79]
SK		.09	.12	.77	.44	[-.14, .33]
PRF		.21	.34	-.61	.54	[-.88, .47]
SK x PRF		.05	.03	2.11	.04	[.003, .10]
R <sup>2</sup>	.26					
F	30.06				.00	
Constant		6.23	1.05	5.92	.00	[4.16, 8.31]
SK		.12	.11	1.15	.25	[-.09, .33]
PRA		.38	.33	1.14	.26	[-.27, 1.03]
SK x PRA		.02	.02	.98	.33	[-.02, .07]
R <sup>2</sup>	.29					
F	35.99				.00	
Constant		10.36	1.32	7.83	.00	[7.75, 12.96]
SK		.21	.14	1.57	.12	[-.48, .05]
AT		.84	.26	3.20	.001	[-1.36, .32]
SK x AT		.11	.02	4.69	.00	[.06, .15]
R <sup>2</sup>	.29					
F	36.51				.00	
Constant		10.22	.149	6.84	.00	[7.28, 13.16]
SK		.39	.16	2.53	.01	[-.70, .09]
PN		.69	.27	2.57	.01	[-1.21, .16]
SK x PN		.13	.03	4.87	.00	[.07, .18]
R <sup>2</sup>	.38					
F	53.16				.00	

p>.05= Non-significant, \*\*\*p < .001

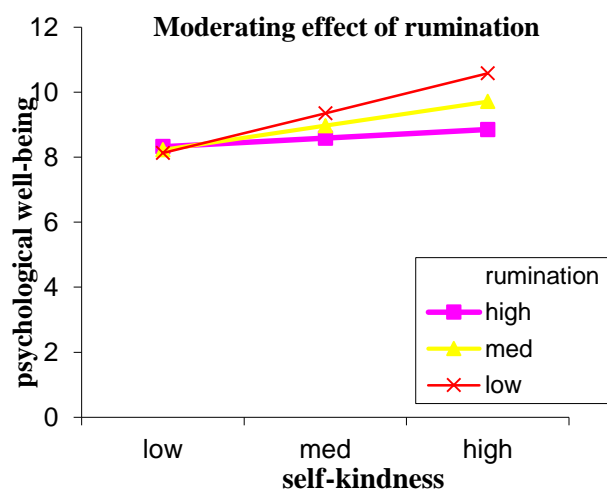
Note: SK= self-kindness; SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning; WHO= WHO (five) well-being index



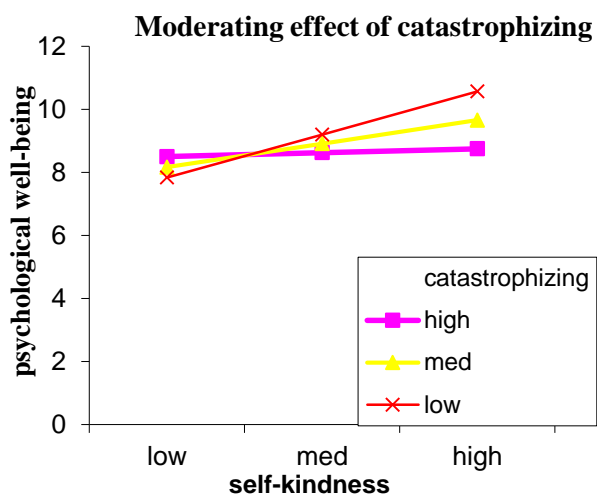
*Figure 4.* Moderating effect of self-blame in predicting psychological well-being among Hepatitis C. patients



*Figure 5.* Moderating effect of other-blame in predicting psychological well-being among Hepatitis C. patients



*Figure 6.* Moderating effect of rumination in predicting psychological well-being among Hepatitis C. patients



*Figure 7.* Moderating effect of catastrophizing in predicting psychological well-being among Hepatitis C. patients

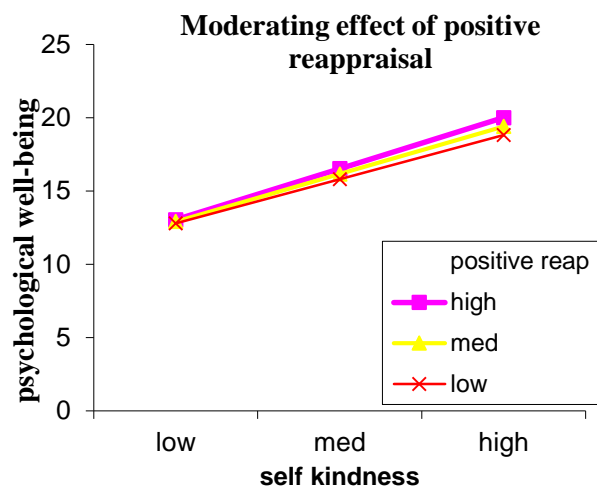


Figure 8. Moderating effect of positive reappraisal in predicting psychological well-being among Hepatitis C. patients

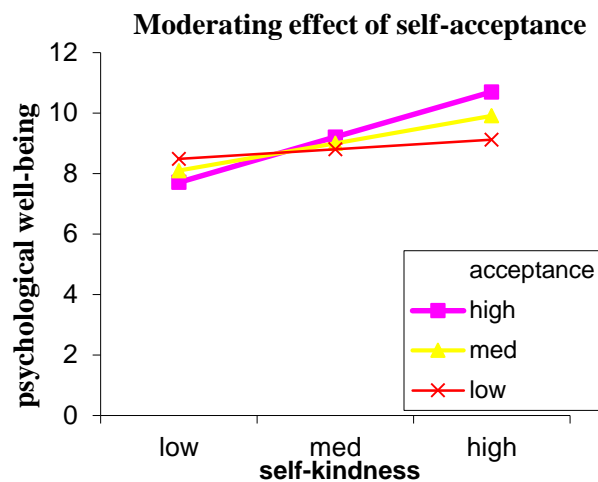


Figure 9. Moderating effect of acceptance in predicting psychological well-being among Hepatitis C. patients

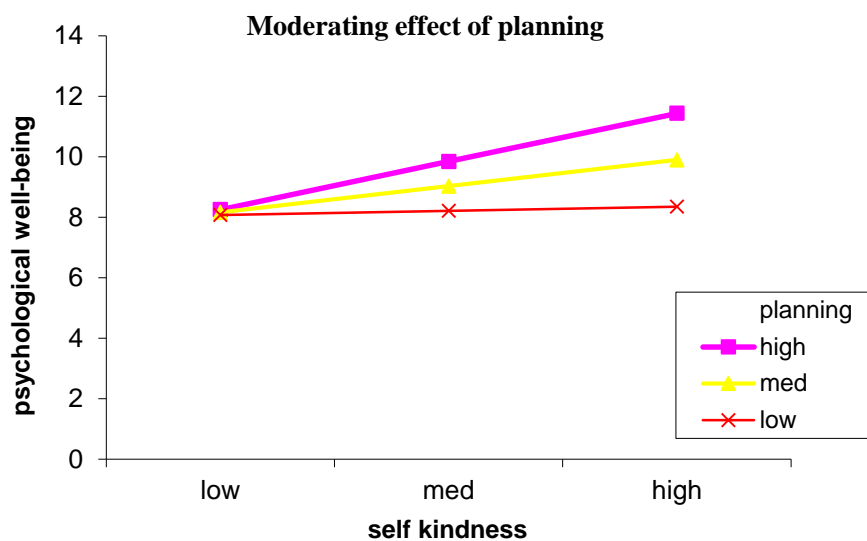


Figure 10. Moderating effect of planning in predicting psychological well-being among Hepatitis C. patients

Table 11 demonstrates the results for moderating role of cognitive emotion-regulation in relationship between self-kindness and psychological well-being among hepatitis C. patients. Presentation the moderation of self-blame Model 1 portrays significant interaction impact of self-blame and self-kindness ( $B = -.10$ ,  $R^2 = .91$ ,  $F = 34.71$ ,  $p < .001$ ) in explaining psychological well-being. Self-blame declined the impact of self-kindness on psychological well-being. Graph (see figure 4) describes this relationship by representing that medium and low level of self-blame reinforce the impression of self-kindness on psychological well-being; though negative relationship appeared when the ability was at high level. Which means when the effect of self-blame is high it weakens the relationship of self-kindness and psychological wellbeing.

Model 2 indicates moderating power of other-blame in association of the self-kindness and psychological well-being. Interaction term between other-blame and self-kindness disclose significant moderation impact ( $B = -.08$ ,  $R^2 = .28$ ,  $F = 32.70$ ,  $p < .001$ ) of other-blame along with generating 28% of variance in psychological well-being. Mod graph (see figure 5) further elucidates these outcomes that high other-blame weakens the effect of self-kindness but low and medium level of other-blame among hepatitis C. patients enriched the impression of self-kindness on psychological well-being.

Model 3 expounds the moderation of rumination. Conclusions disclose that the interaction effect of rumination and self-kindness was statistically significant ( $B = -.08$ ,  $R^2 = .28$ ,  $F = 32.67$ ,  $p < .001$ ) with explaining 28% of variance in hepatitis C. patients' psychological well-being. Graphical exhibition (see figure 6) elucidate these results by signifying that low level of rumination enhanced the influence of self-kindness on psychological well-being. While high level of rumination fades the relationship of self-kindness and psychological well-being.

Model 4 signifies outcomes for moderation effect of catastrophizing. Results expose that catastrophizing significantly moderated ( $B = -.11$ ,  $R^2 = .29$ ,  $F = 34.50$ ,  $p < .001$ ) the relationship between self-kindness and hepatitis C. patients' psychological well-being along with accounting for 29% of variance. Mod graph (Figure 7) explains these outcomes with at different levels of catastrophizing (i.e. high, medium and low). Line graph clarifies that increase in catastrophizing buffers the effect of self-kindness on hepatitis C. patients' psychological well-being. High level of catastrophizing exhibited the same trend. However medium and low level of the catastrophizing boosts the effect of self-kindness on psychological well-being among patients.

Model 5 of the table defines the moderation of putting into perspective. Values of the interaction term direct that putting into perspective did not significantly moderated ( $p > .05$ ) the effect of self-kindness. Model 6 of the table displays outcomes for the moderation of positive refocusing. Interaction term proposes that positive refocusing did not show any significant moderation ( $p > .05$ ) on the relationship between self-kindness and psychological wellbeing among hepatitis C. patients.

Results for moderation power of positive reappraisal are in model 7 of the table. The significant interaction term proposes that positive reappraisal significantly moderated ( $B = .02$ ,  $R^2 = .29$ ,  $F = 35.99$ ,  $p < .001$ ) the influence of self-kindness on psychological wellbeing along with accounting for 29% if variance. These outcomes are further expounded by a graphical presentation (Figure 8) which portrays that all levels of positive refocusing augmented the power of self-kindness on hepatitis C. patients' psychological well-being.

Model 8 displays the outcomes for moderating effect of acceptance. Figures exposed the significant interaction impact ( $R^2 = .29$ ,  $F = 36.51$ ,  $p < .001$ ) of acceptance and self-kindness

explaining 29% of variance in the level of psychological well-being among hepatitis C. patients. Mod graph (Figure 9) further elaborates this effect by representing that all levels of acceptance amplified the effect of self-kindness on psychological well-being.

Model 9 represents outcomes for moderation effect of planning. Results expose that planning significantly moderated ( $B = .13$ ,  $R^2 = .38$ ,  $F = 53.16$ ,  $p < .001$ ) the relationship between self-kindness and hepatitis C. patients' psychological well-being along with accounting for 38% of variance. Mod graph (Figure 10) explains these outcomes with at different levels of planning (i.e. high, medium and low). Slopes of the graph portray that high and medium level of planning maximize the influence of self-kindness on psychological well-being. However, no significant change was witnessed when planning was at low level.

**Table 12**

*Moderating effect of Social support on self-judgment among hepatitis C. patients (N=260)*

Variables	Psychological well-being				
	B	SE B	T	P	95% CI
Constant	7.39	4.42	1.67	.09	[-1.32, 16.09]
SJ	-.01	.22	-.03	.98	[-.43, .45]
SSA	.53	.31	1.72	.09	[-.08, 1.14]
SJ x SSA	-.02	.02	-1.09	.27	[-.05, .02]
R <sup>2</sup>	.25				
F	28.77			.00	
Constant	22.67	4.06	5.58	.00	[14.67, 30.67]
SJ	-.73	.21	-3.52	.001	[-1.14, -.32]
SSB	.66	.43	1.53	.13	[-1.50, .19]
SJ x SSB	-.04	.02	-1.69	.09	[-.01, .08]
R <sup>2</sup>	.24				
F	26.67			.00	
Constant	14.09	2.17	6.50	.00	[9.82, 18.35]
SJ	-.24	.18	-1.92	.06	[-.48, .01]
SSC	.38	.27	1.39	.16	[-.15, .91]
SJ x SSC	-.02	.02	-1.40	.16	[-.05, .01]
R <sup>2</sup>	.23				
F	26.12			.00	

$p > .05$  = Non-significant, \*\*\* $p < .001$

*Note:* SJ= self-kindness; SSA= the confidants/ family (group A); SSB= peers (group B); SSC= experts (official help providers/ supervisors – group C); WHO= WHO (five) well-being index

Table 12 demonstrates outcomes for moderating role of social support in relationship between self-judgment and psychological well-being among hepatitis C. patients. Interaction term of all models suggests that social support did not account for significant moderation ( $p > .05$ ) in the relationship between self-judgment and psychological well-being among hepatitis C. patients.

**Table 13**

*Moderating effect of Cognitive emotion regulation on self-judgment among hepatitis C. patients (N=260)*

Variables	Psychological well-being				
	B	SE B	t	P	95% CI
Constant	32.53	3.32	9.79	.00	[25.98, 39.07]
SJ	-1.17	.19	-6.19	.00	[-1.55, -.80]
SB	-2.51	.49	-5.14	.00	[-3.48, -1.55]
SJ x SB	.12	.03	4.65	.00	[.07, .17]
R <sup>2</sup>	.31				
F	38.16			.00	
Constant	28.21	3.43	8.23	.00	[20.81, 34.19]
SJ	-.81	.19	-4.08	.00	[-1.24, -.47]
OB	-1.99	.50	-3.96	.00	[-2.79, -.84]
SJ x OB	.08	.03	2.83	.005	[.002, .03]
R <sup>2</sup>	.29				
F	34.36			.00	
Constant	27.49	3.39	8.09	.00	[-2.23, 7.01]
SJ	-.85	.19	-4.39	.00	[.57, 1.29]
RM	-1.82	.49	-3.66	.00	[.02, 1.04]
SJ x RM	.08	.03	3.03	.003	[-.13, -.04]
R <sup>2</sup>	.28				
F	32.67			.00	
Constant	30.43	3.79	8.03	.00	[22.96, 37.89]
SJ	-.99	.21	-4.73	.00	[-1.42, -.58]
CT	-2.14	.54	-3.99	.00	[-3.19, -1.08]
SJ x CT	.09	.03	.03	.001	[.04, .15]
R <sup>2</sup>	.29				
F	36.38			.00	
Constant	10.43	2.17	4.80	.00	[6.16, 14.71]
SJ	-.17	.12	-1.48	.14	[-.41, .06]
PIP	1.08	.47	2.29	.02	[.15, 2.00]
SJ x PIP	-.02	.03	-.89	.38	[-.08, .03]
R <sup>2</sup>	.32				
F	40.88			.00	
Constant	9.34	2.07	4.51	.00	[5.26, 13.41]
SJ	-.09	.11	-.78	.43	[-.31, .13]
PRF	1.43	.44	3.27	.001	[.57, 2.29]
SJ x PRF	-.05	.03	-2.08	.04	[-.11, -.002]

R <sup>2</sup>	.31					
F	38.26				.00	
Constant		9.34	2.07	4.51	.00	[5.26, 13.41]
SJ		-.08	.11	-.78	.43	[-.31, .13]
PRA		1.43	.44	3.27	.001	[.57, 2.29]
SJ x PRA		-.05	.03	-2.08	.04	[-.11, -.002]
R <sup>2</sup>	.31					
F	38.26				.00	
Constant		17.52	3.26	5.37	.00	[11.09, 23.95]
SJ		-.49	.18	-2.69	.008	[-.85, -.13]
AT		.24	.48	.49	.62	[.19, .70]
SJ x AT		-.02	.03	-.81	.42	[-.04, .09]
R <sup>2</sup>	.29					
F	36.51				.00	
Constant		16.54	5.07	3.26	.001	[6.55, 26.52]
SJ		-.51	.26	-1.98	.04	[-1.01, -.003]
PN		.24	.64	.37	.71	[1.02, 1.05]
SJ x PN		-.04	.04	-1.09	.28	[-.03, .10]
R <sup>2</sup>	.28					
F	33.29				.00	

p>.05= Non-significant, \*\*\*p < .001

Note: SJ= self-judgment; SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning; WHO= WHO (five) well-being index

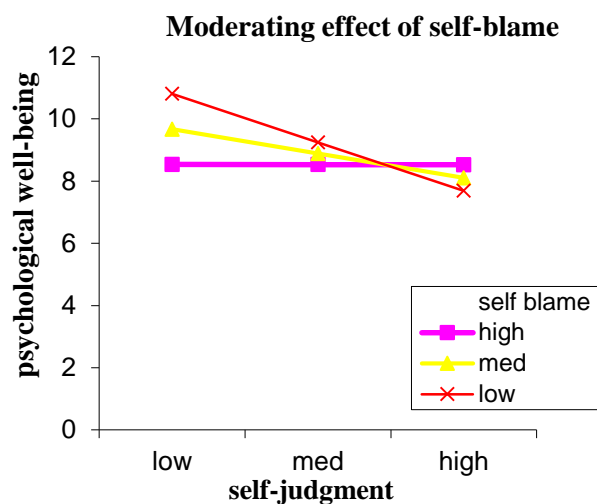


Figure 11. Moderating effect of self-blame in predicting psychological well-being among Hepatitis C. patients

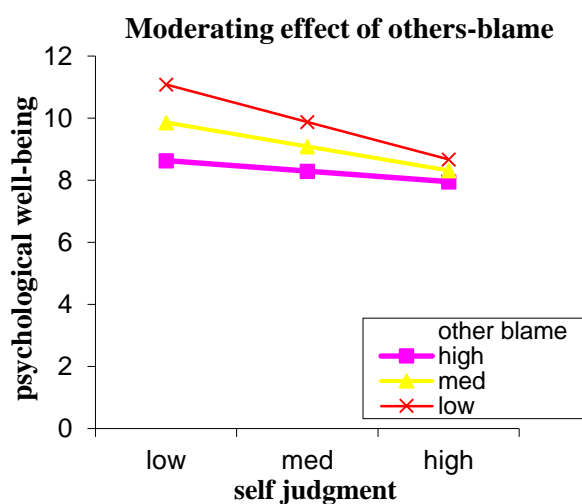


Figure 12. Moderating effect of others-blame in predicting psychological well-being among Hepatitis C. patients



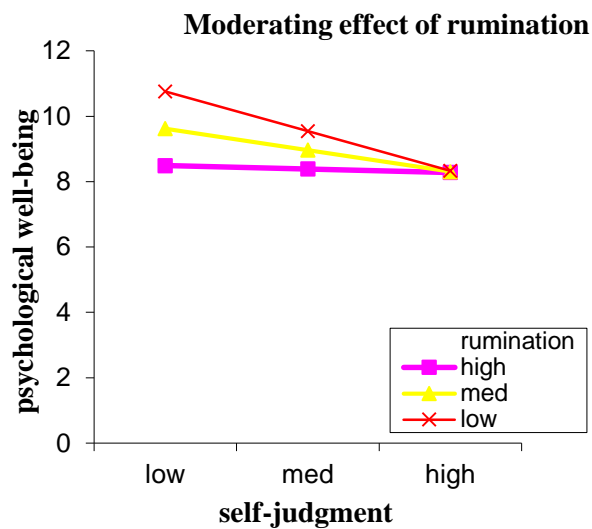


Figure 13. Moderating effect of rumination in predicting psychological well-being among Hepatitis C. patients

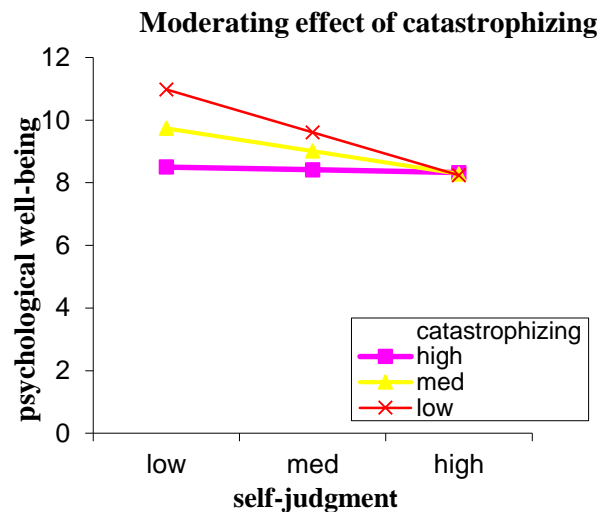


Figure 14. Moderating effect of catastrophizing in predicting psychological well-being among Hepatitis C. patients

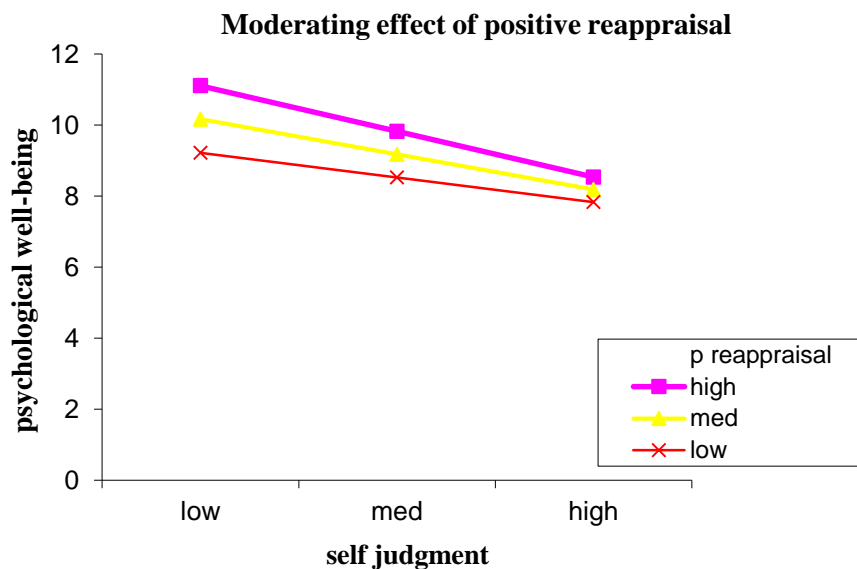


Figure 15. Moderating effect of positive reappraisal in predicting psychological well-being among Hepatitis C. patients

Table 13 demonstrates the results for moderating role of cognitive emotion-regulation in relationship between self-judgment and psychological well-being among hepatitis C. patients. Showing the moderating role of self-blame Model 1 depicts significant interaction effect of self-blame and self-judgment ( $B = .12$ ,  $R^2 = .31$ ,  $F = 38.16$ ,  $p < .001$ ) in explaining psychological well-being. Serving as a protective factor, self-blame and self-judgment collectively decreased psychological well-being. Mod graph (Figure 11) also explains this pattern of relationship by demonstrating that medium and low level of self-blame declined the impact of self-judgment on psychological well-being; however no differences in the relationship appeared when the ability was at high level.

Model 2 indicates moderating power of other-blame in association of the self-judgment and psychological well-being. Interaction term between other-blame and self-judgment reveal a significant moderation effect ( $B = .08$ ,  $R^2 = .29$ ,  $F = 34.36$ ,  $p < .001$ ) of other-blame along with producing 29% of variance in psychological well-being. Mod graph (Figure 12) further elucidates these results that all level of other-blame with self-judgment declined psychological well-being among hepatitis C. patients.

Model 3 in the table expounds the moderating effect of rumination. Findings disclose that the interaction effect of rumination and self-judgment was statistically significant ( $B = .08$ ,  $R^2 = .28$ ,  $F = 32.67$ ,  $p < .001$ ) in explaining psychological well-being. Rumination along with self-judgment dropped the level of psychological well-being. Mod graph (Figure 13) also explicates this pattern of connection by demonstrating that medium and low level of rumination declined the impact of self-judgment on psychological well-being.

Model 4 represents outcomes for moderation effect of catastrophizing. Results expose that catastrophizing significantly moderated ( $B = .09$ ,  $R^2 = .29$ ,  $F = 36.38$ ,  $p < .001$ ) the relationship between self-judgment and hepatitis C. patients' psychological well-being along with accounting for 29% of variance. Mod graph (Figure 14) describes these outcomes with at different levels of catastrophizing (i.e. high, medium and low). Line graph clarifies that increase in catastrophizing buffer the effect of self-judgment on hepatitis C. patients' psychological well-being. Different levels of the catastrophizing and self-judgment demonstrated the decline in psychological wellbeing among patients.

Model 5 explains the moderation impact of putting into perspective. Results of the interaction term direct that putting into perspective did not significantly moderated ( $p > .05$ ) the influence of self-judgment. Model 6 of the table illustrates the fallouts for the moderation effect of positive refocusing. Interaction term proposes that positive refocusing did not account for significant moderation ( $p > .05$ ) in the relationship between self-judgment and psychological well-being among patients with hepatitis C.

Results for moderation influence of positive reappraisal are given in model 7 of the table. A significant interaction term proposes that positive reappraisal significantly moderated ( $B = -.05$ ,  $R^2 = .31$ ,  $F = 38.26$ ,  $p < .001$ ) the impact of self-judgment on psychological wellbeing along with accounting for 31% if variance. These outcomes are further expanded through a graphical presentation (Figure 15) which exposes that all levels of positive refocusing buffered the power of self-judgment on hepatitis C. patients' psychological well-being.

As far Model 8 and 9 (acceptance & planning) are concerned, results divulge that these abilities did not account for significant moderation in the relationship between self-judgment and psychological well-being among hepatitis C. patients.

**Table 14**

*Moderating effect of Social support on Common humanity among hepatitis C. patients (N=260)*

Variables	Psychological well-being				
	B	SE B	T	P	95% CI
Constant	7.13	1.52	4.68	.00	[4.13, 10.13]
CH	.32	.18	1.77	.08	[-.04, .66]
SSA	.18	.17	1.04	.29	[-.51, .16]
CH x SSA	.01	.01	.83	.41	[-.02, .04]
R <sup>2</sup>	.32				
F	40.84			.00	
Constant	2.85	1.51	1.88	.06	[-.13, 5.82]
CH	.66	.17	3.84	.00	[.32, 1.00]
SSB	.33	.17	2.03	.04	[.01, .66]
CH x SSB	.03	.02	1.59	.11	[-.06, .01]
R <sup>2</sup>	.33				
F	42.39			.00	
Constant	9.43	1.11	8.51	.00	[7.25, 11.61]
CH	.11	.09	1.16	.25	[-.08, .29]
SSC	.57	.17	3.43	.00	[-.89, .24]
CH x SSC	.05	.01	3.43	.00	[.02, .07]
R <sup>2</sup>	.35				
F	46.33			.00	

p>.05= Non-significant, \*\*\*p < .001

Note: CH= common humanity, SSA= the confidants/ family (group A), SSB= peers (group B), SSC= experts (official help providers/ supervisors – group C), WHO= WHO (five) well-being index

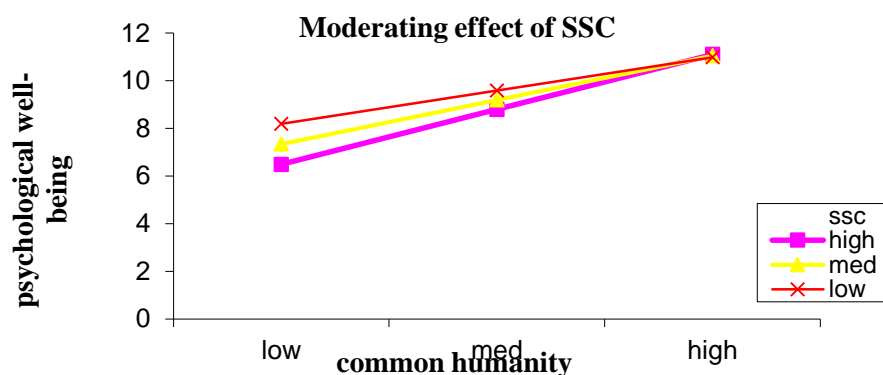


Figure 16. Moderating effect of Social support (supervisors/official help providers-SSC) in predicting psychological well-being among Hepatitis C. patients

Outcomes attained in Table (14) disclose the moderating role of social support (i.e. family, peers, official help providers/ supervisors) in the affiliation between common humanity and psychological well-being among hepatitis C. patients.

Values presented in model 1 and 2 of the table expose that social support of family/confidants and peers did not account for significant moderation ( $p > .05$ ) in the association between common humanity and psychological well-being.

Model 3 illustrates the results for the moderating power of social support (official help providers/ supervisors). Values revealed a significant interaction effect ( $B = .05$   $R^2 = .35$ ,  $F = 46.33$ ,  $p < .001$ ) of social support (official help providers/ supervisors) and common humanity explaining 35% of variance in the level of psychological well-being among hepatitis C. patients. Mod graph (Figure16) further expounds this effect by representing that high, medium and low levels of social support (official help providers/ supervisors) raised this effect of common humanity on psychological well-being.

**Table 15**

*Moderating effect of Cognitive emotion regulation on common humanity among hepatitis C. patients (N=260)*

Variables	Psychological well-being				
	B	SE B	t	P	95% CI
Constant	4.98	1.68	2.96	.003	[1.67, 8.29]
CH	.68	.15	4.50	.00	[.38, .98]
SB	-.22	.23	-.96	.34	[-.23, .66]
CH x SB	-.05	.02	-2.24	.03	[.07, .17]
R <sup>2</sup>	.35				
F	46.13			.00	
Constant	8.46	1.92	4.41	.00	[4.68, 12.24]
CH	.49	.16	3.05	.003	[.17, .82]
OB	-.23	.25	-.90	.37	[-.73, .27]
CH x OB	-.03	.02	-1.17	.24	[-.07, .02]
R <sup>2</sup>	.38				
F	51.45			.00	
Constant	6.68	1.76	3.79	.00	[3.21, 10.14]
CH	.54	.16	3.46	.001	[.23, .84]

RM		-.001	.22	-.01	.99	[-.44, .43]
CH x RM		-.03	.02	-1.34	.18	[-.07, .01]
R <sup>2</sup>	.35					
F	45.57				.00	
Constant		6.45	1.66	3.88	.00	[3.18, 9.72]
CH		.59	.15	3.87	.00	[.29, .90]
CT		-.02	.21	-.12	.91	[-.38, .44]
CH x CT		-.04	.02	-1.71	.09	[-.08, .01]
R <sup>2</sup>	.36					
F	47.41				.00	
Constant		5.96	.95	6.25	.00	[4.08, 7.83]
CH		.19	.09	2.08	.04	[.01, .39]
PIP		.20	.27	.74	.46	[-.34, .74]
CH x PIP		.03	.02	1.25	.21	[-.02, .07]
R <sup>2</sup>	.37					
F	51.07				.00	
Constant		5.97	.84	7.06	.00	[4.30, 7.63]
CH		.19	.09	2.18	.03	[.02, .37]
PRF		.27	.25	1.09	.28	[-.22, .77]
CH x PRF		.02	.02	1.13	.26	[-.02, .06]
R <sup>2</sup>	.39					
F	53.48				.00	
Constant		7.17	.97	7.39	.00	[5.26, 9.08]
CH		.11	.09	1.17	.24	[-.08, .29]
PRA		.19	.27	.74	.46	[-.72, .33]
CH x PRA		.05	.02	2.54	.01	[.01, .09]
R <sup>2</sup>	.37					
F	51.11				.00	
Constant		11.68	1.69	6.93	.00	[8.36, 14.99]
CH		.06	.15	.38	.71	[-.35, .24]
AT		1.36	.38	3.56	.00	[-2.12, .61]
CH x AT		.09	.03	3.49	.001	[.04, .15]
R <sup>2</sup>	.35					
F	46.57				.00	
Constant		3.98	1.67	2.38	.02	[.69, 7.27]
CH		.49	.21	2.32	.02	[.08, .91]
PN		.40	.26	1.52	.13	[-.12, .92]
CH x PN		.02	.03	.79	.43	[-.08, .03]
R <sup>2</sup>	.33					
F	42.26				.00	

p>.05= Non-significant, \*\*\*p < .001

*Note:* CM=common humanity; SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning' WHO= WHO (five) well-being index

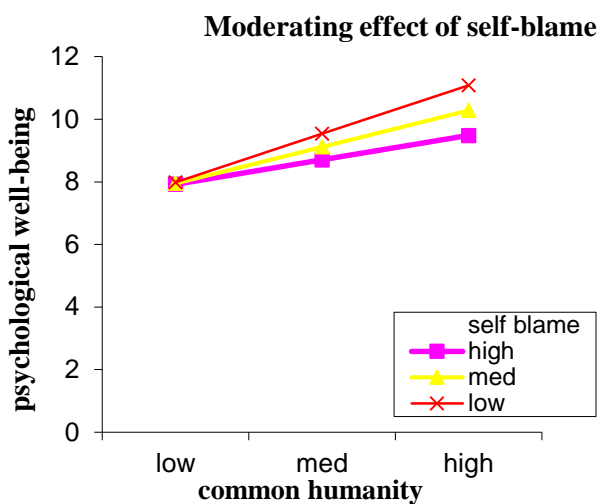


Figure 17. Moderating effect of self-blame in predicting psychological well-being among Hepatitis C. patients

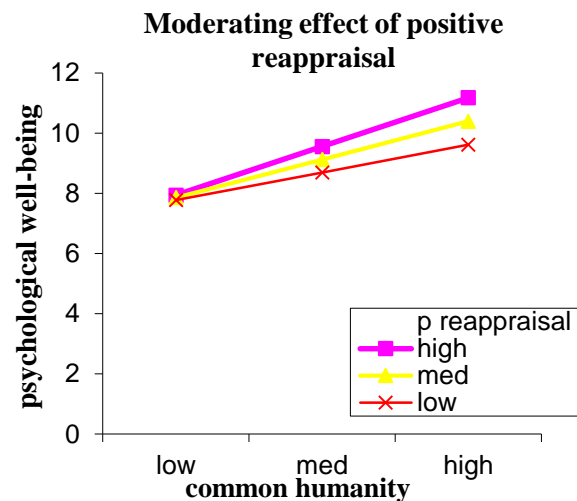


Figure 18. Moderating effect of Positive reappraisal in predicting psychological well-being among Hepatitis C. patients

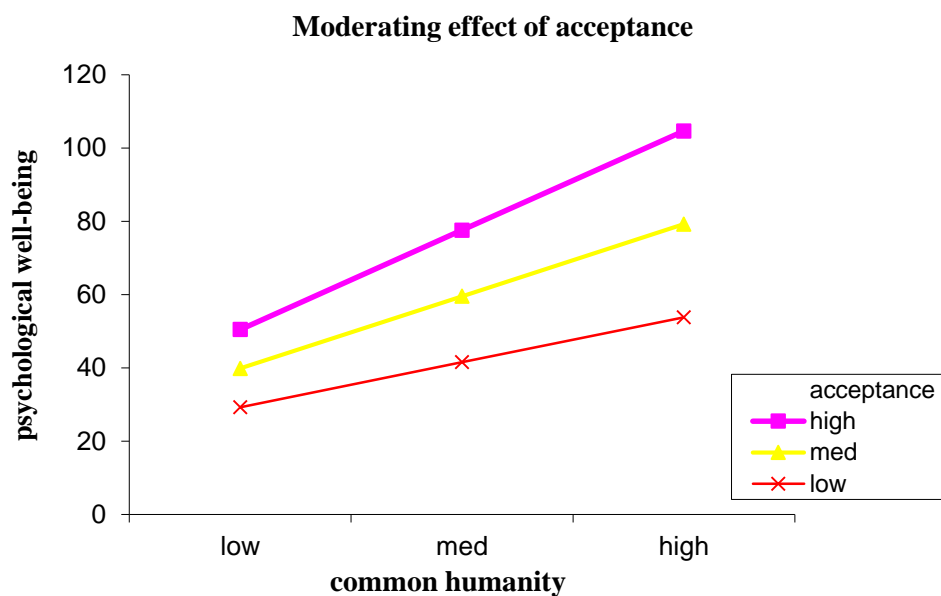


Figure 19. Moderating effect of Acceptance in predicting psychological well-being among Hepatitis C. patients

Table 15 determines the results for moderating role of cognitive emotion-regulation in relationship between common humanity and psychological well-being among hepatitis C. patients. Presenting the moderating role of self-blame Model 1 describes significant interaction effect of self-blame and common humanity ( $B = -.05$ ,  $R^2 = .35$ ,  $F = 51.45$ ,  $p < .001$ ) in elucidating psychological well-being. Serving as a protective factor, common humanity elevated the impression of psychological well-being. Mod graph (Figure 17) also enlightens this pattern of association by indicating that low and medium levels of self-blame reinforce the influence of common humanity on psychological well-being. While high level of self-blame demonstrate that there is low effect of common humanity on psychological well-being.

Model 2, 3, 4, 5 and 6 indicates moderating power of other-blame, rumination, catastrophizing, putting into perspective and positive refocusing in association of the common humanity and psychological well-being. Values of the interaction term express that other-blame, rumination, catastrophizing, putting into perspective and positive refocusing did not significantly moderated ( $p > .05$ ) the effect of common humanity on hepatitis C. patients' psychological well-being.

Results for moderation influence of positive reappraisal are stated in model 7. The interaction term proposes that positive reappraisal significantly moderated ( $B = .05$ ,  $R^2 = .37$ ,  $F = 46.57$ ,  $p < .001$ ) the effect of common humanity on psychological well-being along with accounting for 37% of variance. These conclusions are further expanded through a graphical exhibition (Figure 18) which reveals that all levels of positive refocusing enlarged the power of common humanity on hepatitis C. patients' psychological well-being.



Model 8 exhibits the outcomes for moderating influence of acceptance. Figures exposed a significant interaction effect ( $B = .09$ ,  $R^2 = .35$ ,  $F = 46.57$ ,  $p < .001$ ) of acceptance and common humanity explaining 35% of variance in the level of psychological well-being among hepatitis C patients. Mod graph (Figure 19) further explains this effect by demonstrating that all levels of acceptance improved the effect of common humanity on psychological well-being.

Model 9 represents outcomes for moderation effect of planning. Results expose that planning did not significantly moderated the relationship between common humanity and hepatitis C patients' psychological well-being.

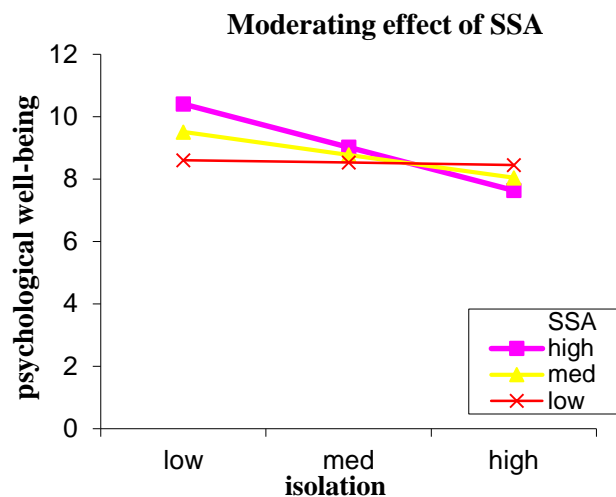
**Table 16**

*Moderating effect of Social support on Isolation among hepatitis C. patients (N=260)*

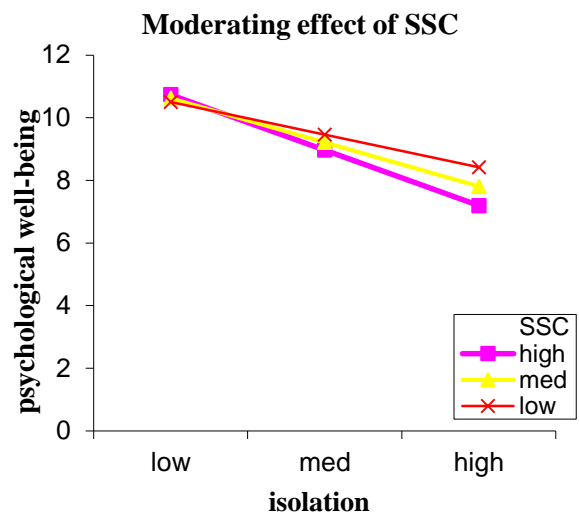
Variables	Psychological well-being				
	<i>B</i>	<i>SE B</i>	<i>T</i>	<i>P</i>	95% CI
Constant	4.83	2.07	2.33	.02	[.76, 8.91]
IS	-.22	.13	-1.67	.09	[-.04, .49]
SSA	.73	.16	4.44	.00	[.40, 1.05]
IS x SSA	-.04	.01	-3.24	.001	[-.07, -.02]
R <sup>2</sup>	.27				
F	31.92			.00	
Constant	13.07	2.85	4.59	.00	[7.46, 18.68]
IS	-.36	.18	-2.04	.04	[-.71, -.01]
SSB	.13	.31	.42	.68	[-.48, .73]
IS x SSB	-.003	.02	-.20	.84	[-.03, -.04]
R <sup>2</sup>	.22				
F	24.37			.00	
Constant	11.13	1.61	6.91	.00	[7.95, 14.30]
IS	-.08	.11	-.68	.49	[-.30, .15]
SSC	.48	.21	2.26	.02	[.06, .90]
IS x SSC	-.04	.02	-2.44	.02	[-.07, -.01]
R <sup>2</sup>	.22				
F	24.74			.00	

$p > .05$  = Non-significant, \*\*\* $p < .001$

*Note:* IS=isolation; SSA= the confidants/ family (group A); SSB= peers (group B); SSC= experts (official help providers/ supervisors – group C); WHO= WHO (five) well-being index



*Figure 20.* Moderating effect of Social support (family-SSA) in predicting psychological well-being among Hepatitis C. patients



*Figure 21.* Moderating effect of Social support (supervisors/official help providers-SSC) in predicting psychological well-being among Hepatitis C. patients

Results obtained in Table (16) exhibit the moderating role of social support (i.e. family, peers, official help providers/ supervisors) in the association between isolation and psychological well-being among hepatitis C. patients. Model 1 demonstrates the interaction effect of social support (family) and isolation on psychological well-being among hepatitis C. patients. Findings suggest that social support (family) and isolation interactively produced 27% ( $F = 31.92$ ,  $R^2 = .27$ ,  $p < .001$ ) of variance in explaining psychological well-being. Being a protective factor, social support (family) had reversed impact in the model by decreasing the influence of isolation on psychological well-being among hepatitis C. patients. Given graph (Figure 1) further illuminates this relationship at diverse levels (i.e. high, medium and low) of social support (family). The mod graph displays that high and medium levels of social support (family) lesser the effect of isolation

on psychological well-being whereas low level of social support (family) slightly enlarged this effect.

Model 2 demonstrates outcomes for the moderating impact of social support (peers). The interaction term exposed no significant interaction impact of social support (peers) and isolation.

Outcomes for the moderating effect of social support (official help providers/ supervisors) are explained in model 3. Values discovered a significant interaction effect ( $R^2 = .04$ ,  $F = 24.74$ ,  $p < .001$ ) of social support (official help providers/ supervisors) and isolation explaining 4% of variance in the level of psychological well-being among hepatitis C. patients. Mod graph (Figure 21) further explains this influence by representing that high, medium and low levels of social support (official help providers/ supervisors) dropped this effect of isolation on psychological well-being.

**Table 17**

*Moderating effect of Cognitive emotion regulation on Isolation among hepatitis C. patients (N=260)*

Variables	Psychological well-being				
	<i>B</i>	<i>SE B</i>	<i>t</i>	<i>P</i>	95% CI
Constant	27.18	2.18	12.46	.00	[22.88, 31.47]
IS	-1.04	.15	-6.95	.00	[-1.34, -.75]
SB	-2.05	.33	-6.29	.00	[-2.69, -1.41]
IS x SB	.11	.02	5.38	.00	[.07, .16]
R <sup>2</sup>	.32				
F	41.05			.00	
Constant	24.59	2.32	10.59	.00	[20.02, 29.17]
IS	-.75	.17	-4.45	.00	[-1.08, -.42]
OB	-1.69	.34	-4.97	.00	[-2.37, -1.03]
IS x OB	.08	.02	3.24	.001	[.03, .12]
R <sup>2</sup>	.33				
F	41.81			.00	
Constant	24.49	2.09	11.69	.00	[20.37, 28.63]
IS	-.84	.15	-5.56	.00	[-1.13, -.54]
RM	-1.59	.29	-5.37	.00	[-2.18, -1.01]
IS x RM	.08	.02	4.14	.00	[.04, .12]
R <sup>2</sup>	.31				
F	38.95			.00	
Constant	26.32	2.28	11.52	.00	[21.82, 30.82]

IS		-.93	.16	-5.96	.00	[-1.24, -.63]
CT		-1.78	.31	-5.65	.00	[-2.41, -1.17]
IS x CT		.09	.02	4.45	.00	[.05, .13]
R <sup>2</sup>	.32					
F	40.98				.00	
Constant		7.55	1.41	5.36	.00	[4.78, 10.33]
IS		-.02	.09	-.24	.81	[-.20, .16]
PIP		1.36	.30	4.50	.00	[.76, 1.96]
IS x PIP		-.05	.02	-2.38	.02	[-.09, .01]
R <sup>2</sup>	.32					
F	40.38				.00	
Constant		7.44	1.31	5.66	.00	[4.85, 10.03]
IS		-.01	.08	-.12	.91	[-.18, .16]
PRF		1.38	.29	4.84	.00	[.82, 1.94]
IS x PRF		-.05	.02	-2.57	.01	[-.09, -.013]
R <sup>2</sup>	.34					
F	44.05				.00	
Constant		7.39	1.41	5.26	.00	[4.63, 10.17]
IS		-.02	.09	-.23	.82	[-.16, -.02]
PRA		1.44	.29	4.88	.00	[.86, 2.02]
IS x PRA		-.07	.02	-3.18	.001	[-.11, -.03]
R <sup>2</sup>	.37					
F	51.11				.00	
Constant		8.50	2.07	4.11	.00	[4.42, 12.58]
IS		-.04	.16	-.24	.81	[-.27, -.05]
AT		.93	.35	2.69	.01	[.25, 1.16]
IS x AT		-.06	.03	-2.05	.04	[-.12, -.002]
R <sup>2</sup>	.24					
F	26.38				.00	
Constant		2.30	2.34	.99	.31	[-2.29, 6.90]
IS		-.31	.15	-2.06	.04	[-.59, -.01]
PN		1.57	.32	4.86	.00	[.93, 2.19]
IS x PN		-.08	.02	-3.51	.001	[-.12, -.03]
R <sup>2</sup>	.30					
F	36.92				.00	

p>.05= Non-significant, \*\*\*p < .001

*Note:* IS=isolation; SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning; WHO= WHO (five) well-being index

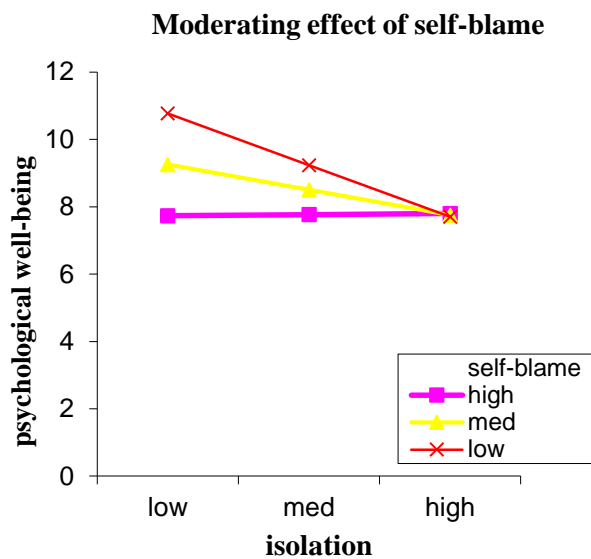


Figure 22. Moderating effect of self-blame in predicting psychological well-being among Hepatitis C. patients

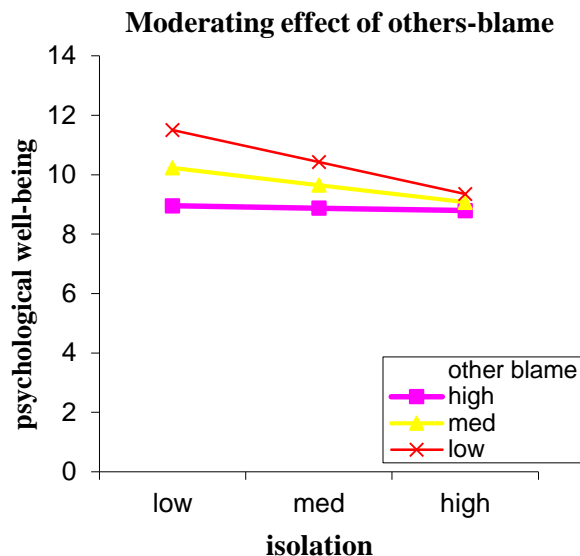


Figure 23. Moderating effect of others-blame in predicting psychological well-being among Hepatitis C. patients

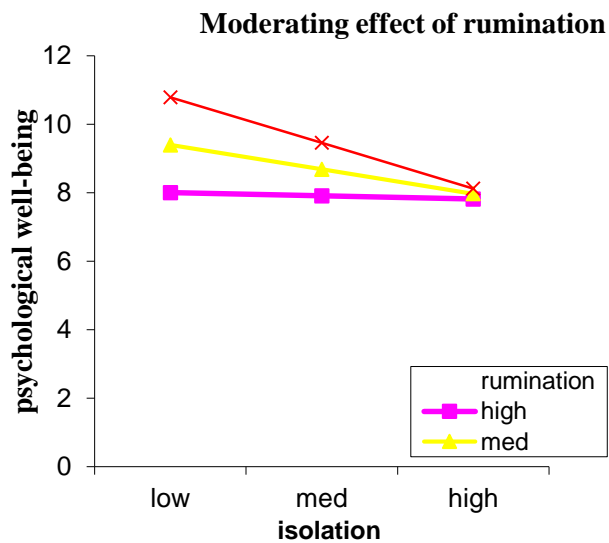


Figure 24. Moderating effect of rumination in predicting psychological well-being among Hepatitis C. patients

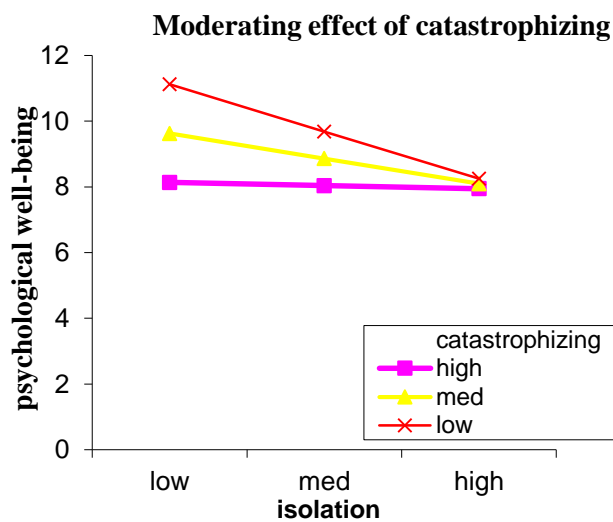
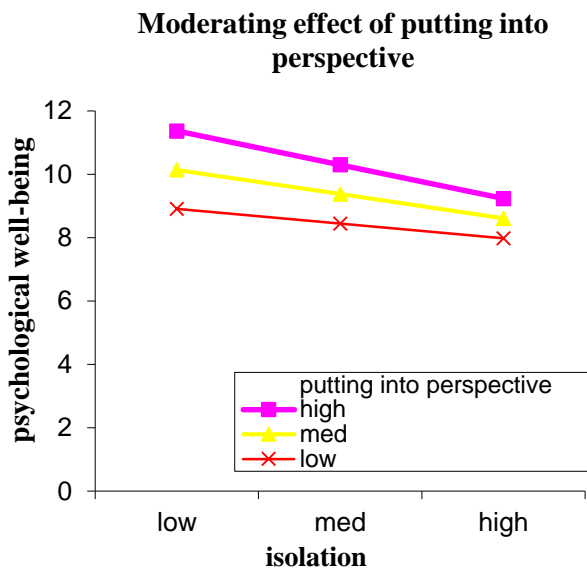
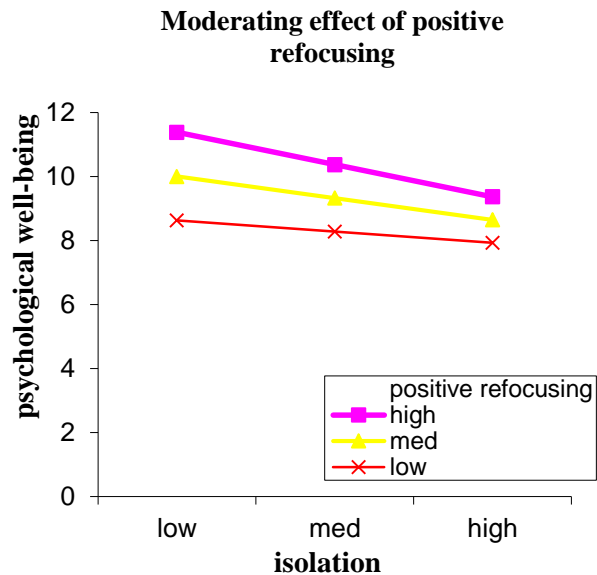


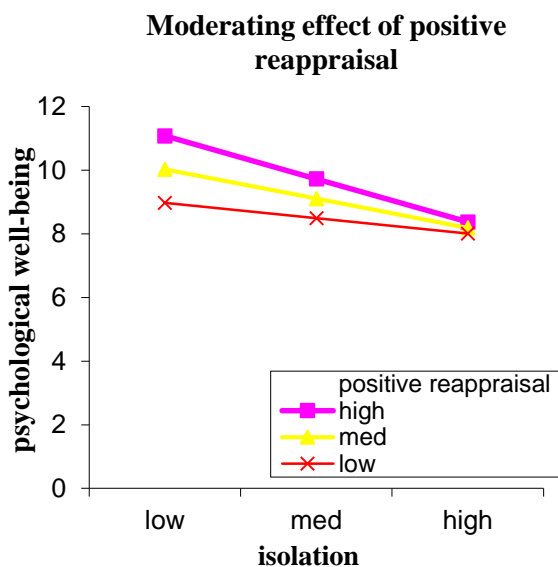
Figure 25. Moderating effect of catastrophizing in predicting psychological well-being among Hepatitis C. patients



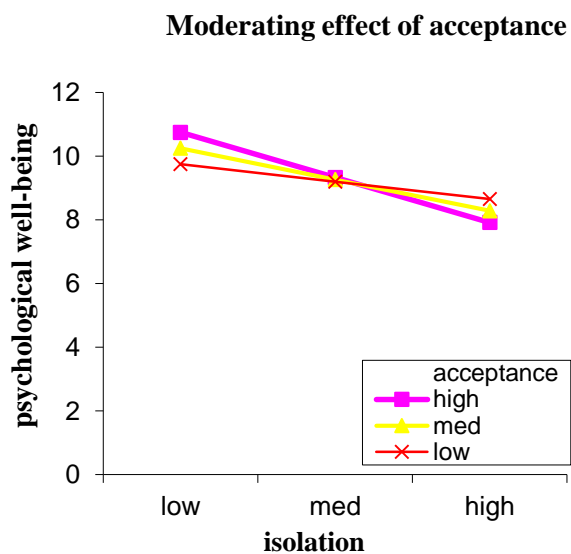
*Figure 26.* Moderating effect of putting into perspective in predicting psychological well-being among Hepatitis C. patients



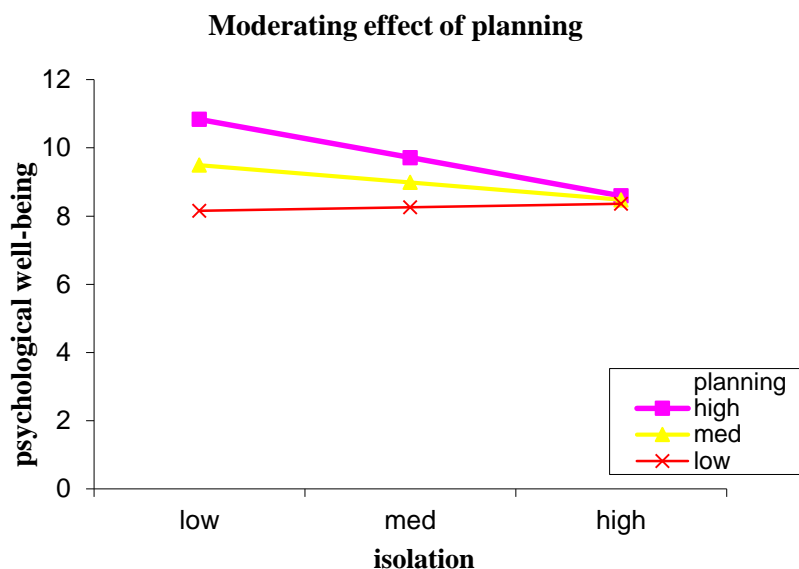
*Figure 27.* Moderating effect of positive refocusing in predicting psychological well-being among Hepatitis C. patients



*Figure 28.* Moderating effect of positive reappraisal in predicting psychological well-being among Hepatitis C. patients



*Figure 29.* Moderating effect of acceptance in predicting psychological well-being among Hepatitis C. patients



*Figure 30.* Moderating effect of planning in predicting psychological well-being among Hepatitis C. patients

Table 17 reveals the fallouts for moderating role of cognitive emotion-regulation in association between isolation and psychological well-being among hepatitis C. patients. Presenting the moderating role of self-blame Model 1 portrays significant interaction effect of self-blame and isolation ( $B = .11$ ,  $R^2 = .32$ ,  $F = 41.05$ ,  $p < .001$ ) in explaining psychological well-being. Serving as a risk factor, self-blame along with isolation minimized the level of psychological well-being. Mod graph (Figure 22) also describes this pattern of relationship by representing that medium and low level of self-blame lessened the impression of isolation on psychological well-being; however, at high level the impact of isolation decreased and effect of self-blame increased on psychological wellbeing.

Model 2 indicates moderating power of other-blame in association of the isolation and psychological well-being. Interaction term between other-blame and isolation disclose significant moderation effect ( $B = .08$ ,  $R^2 = .33$ ,  $F = 41.81$ ,  $p < .001$ ) of other-blame along with producing

33% of variance in psychological well-being. Mod graph (Figure 23) further elucidates these outcomes that medium level and low level of other-blame among hepatitis C. patients reduced the impression of isolation on psychological well-being; though high level showed no differences in this relationship.

Model 3 in the table expounds the moderation role of rumination. Results disclose that the interaction influence of rumination and isolation was statistically significant ( $B = .08$ ,  $R^2 = .31$ ,  $F = 38.95$ ,  $p < .001$ ) with explaining 31% of variance in hepatitis C. patients' psychological well-being. Graphical demonstration (Figure 24) of these findings elucidate these conclusions by proposing that medium and low levels of rumination declined the influence of isolation on psychological well-being while no differences in the relationship seemed when the ability was at high level.

Model 4 denotes outcomes for moderation influence of catastrophizing. Outcomes expose that catastrophizing significantly moderated ( $B = .09$ ,  $R^2 = .32$ ,  $F = 40.98$ ,  $p < .001$ ) the relationship between isolation and hepatitis C. patients' psychological well-being along with accounting for 32% of variance. Mod graph (Figure 25) explains these outcomes with at different levels of catastrophizing (i.e. high, medium and low). Line graph clarifies that increase in catastrophizing along with isolation buffered on hepatitis C. patients' psychological well-being. Medium and low level of the catastrophizing also declined similar result, though, high level of catastrophizing did not develop significant differences in elucidating this impact.

Model 5 of the table highlights the moderation impact of putting into perspective. Outcomes of the interaction term direct that putting into perspective significantly moderated ( $B = -.05$ ,  $R^2 = .32$ ,  $F = 40.38$ ,  $p < .001$ ) the effect of isolation. Mod graph (Figure 26) further elaborates



this effect by representing that all levels of putting into perspective dropped the effect of isolation on psychological well-being.

Model 6 of the table shows results for the moderation impact of positive refocusing. Interaction term proposes that positive refocusing significantly moderated ( $B = -.05$ ,  $R^2 = .34$ ,  $F = 44.5$ ,  $p < .001$ ) the effect of isolation. Mod graph (Figure 27) further explains this impact by demonstrating that high and medium levels of positive refocusing weakened the influence of isolation on psychological well-being; though low level of positive refocusing increased this effect.

Results for moderation power of positive reappraisal are given in model 7 of the table. Significant interaction term recommends that positive reappraisal significantly moderated ( $B = -.07$ ,  $R^2 = .37$ ,  $F = 51.11$ ,  $p < .001$ ) the effect of isolation on psychological well-being along with accounting for 37% of variance. These outcomes are further expounded through a graphical presentation (Figure 28) which portrays that high, medium and low levels of positive refocusing minimized the power of isolation on hepatitis C. patients' psychological well-being.

Model 8 displays the outcomes for moderating power of acceptance. Findings discovered a significant interaction effect ( $R^2 = .24$ ,  $F = 26.38$ ,  $p < .001$ ) of acceptance and isolation explaining 24% of variance in the level of psychological well-being among hepatitis C. patients. Mod graph (Figure 29) further elaborates this effect by representing that all levels of acceptance lessen the effect of isolation on psychological well-being.

Model 9 represents outcomes for moderation effect of planning. Results expose that planning significantly moderated ( $B = -.08$ ,  $R^2 = .30$ ,  $F = 36.92$ ,  $p < .001$ ) the relationship between isolation and hepatitis C. patients' psychological well-being along with accounting for 30% of variance. Mod graph (Figure 30) explains these outcomes with at different levels of planning (i.e.

high, medium and low). Slopes of the graph portray that high and medium level of planning reduced the power of isolation on psychological well-being. However, increase was witnessed when planning was at low level.

**Table 18**

*Moderating effect of Social support on Mindfulness among hepatitis C. patients (N=260)*

Variables	Psychological well-being				
	B	SE B	T	P	95% CI
Constant	7.06	1.58	4.47	.00	[3.95, 10.18]
MF	.19	.22	.87	.39	[-.24, .61]
SSA	.06	.16	.38	.71	[-.37, .25]
MF x SSA	.01	.01	.99	.32	[-.01, .04]
R <sup>2</sup>	.28				
F	33.11			.00	
Constant	3.74	1.77	2.12	.04	[.26, 7.22]
MF	.53	.20	2.63	.01	[.13, .93]
SSB	.23	.19	1.19	.24	[-.15, .62]
MF x SSB	.01	.02	.48	.63	[-.05, .03]
R <sup>2</sup>	.28				
F	33.97			.00	
Constant	8.07	1.25	6.46	.00	[5.61, 10.53]
MF	.26	.12	2.18	.03	[.03, .50]
SSC	.35	.17	2.05	.04	[-.68, .01]
MF x SSC	.03	.01	1.79	.07	[-.002, .05]
R <sup>2</sup>	.29				
F	34.26			.00	

p>.05= Non-significant, \*\*\*p < .001

*Note:* MF=mindfulness; SSA= the confidants/ family (group A); SSB= peers (group B); SSC= experts (official help providers/ supervisors – group C); WHO= WHO (five) well-being index

Results obtained in Table (18) display the moderating role of social support (i.e. family, peers, official help providers/ supervisors) in the association between mindfulness and psychological well-being among hepatitis C. patients. Model 1, 2 and 3 demonstrates that the interaction term revealed no significant interaction effect of social support (i.e. family, peers, official help providers/ supervisors) and mindfulness.

**Table 19**

*Moderating effect of Cognitive emotion regulation on Mindfulness among hepatitis C. patients (N=260)*

Variables	Psychological well-being				
	B	SE B	t	P	95% CI
Constant	1.95	1.72	1.14	.26	[-1.43, 5.33]
MF	1.08	.16	6.61	.00	[.76, 1.40]
SB	-.65	.22	-2.93	.003	[-1.21, -1.09]
MF x SB	-.11	.02	-4.47	.00	[-.16, -.06]
R <sup>2</sup>	.34				
F	44.45			.00	
Constant	5.85	1.98	2.96	.003	[1.96, 9.74]
MF	.82	.18	4.69	.00	[.48, 1.17]
OB	-.16	.26	-.64	.52	[-.34, -.07]
MF x OB	-.08	.03	2.98	.003	[-.13, -.03]
R <sup>2</sup>	.35				
F	46.13			.00	
Constant	4.47	1.83	2.44	.02	[.86, 8.08]
MF	.83	.17	4.88	.00	[.49, 1.17]
RM	-.33	.23	-1.44	.15	[-.12, -.07]
MF x RM	-.07	.02	-2.94	.003	[-.12, -.02]
R <sup>2</sup>	.32				
F	39.91			.00	
Constant	3.14	1.81	1.73	.08	[-.43, 6.71]
MF	1.04	.18	5.63	.00	[.68, 1.40]
CT	-.49	.23	-2.18	.03	[-.95, -.05]
MF x CT	-.10	.03	-3.79	.00	[-.15, -.05]
R <sup>2</sup>	.34				
F	43.29			.00	
Constant	6.46	1.02	6.36	.00	[4.46, 8.46]
MF	.15	.11	1.34	.18	[-.07, .37]
PIP	.12	.28	.41	.68	[-.44, .68]
MF x PIP	.04	.02	1.66	.09	[-.01, .09]
R <sup>2</sup>	.33				
F	42.44			.00	
Constant	6.66	.89	7.50	.00	[4.91, 8.40]
MF	.12	.11	1.13	.26	[-.09, .33]
PRF	.16	.26	.62	.54	[-.34, .66]
MF x PRF	.04	.02	1.78	.08	[-.01, .08]
R <sup>2</sup>	.34				
F	44.54			.00	
Constant	7.37	.99	7.43	.00	[5.42, 9.32]
MF	.10	.11	.98	.33	[-.11, .31]
PRA	.22	.27	.81	.42	[-.74, .31]
MF x PRA	.06	.02	2.64	.01	[.01, .10]
R <sup>2</sup>	.33				
F	41.43			.00	
Constant	8.62	1.43	6.02	.00	[5.79, 11.43]
MF	.40	.18	2.28	.02	[.06, .75]
AT	.93	.29	3.09	.002	[-1.52, .33]
MF x AT	.04	.02	1.76	.08	[-.01, .09]
R <sup>2</sup>	.31				
F	37.69			.00	

Constant	9.13	1.74	5.23	.00	[5.69, 12.56]
MF	.25	.24	1.03	.30	[-.73, .23]
PN	.29	.27	1.05	.29	[-.83, .25]
MF x PN	.08	.03	2.43	.02	[.01, .14]
R <sup>2</sup>	.31				
F	38.05			.00	

p>.05= Non-significant, \*\*\*p < .001

Note: MF=mindfulness; SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning, WHO= WHO (five) well-being index

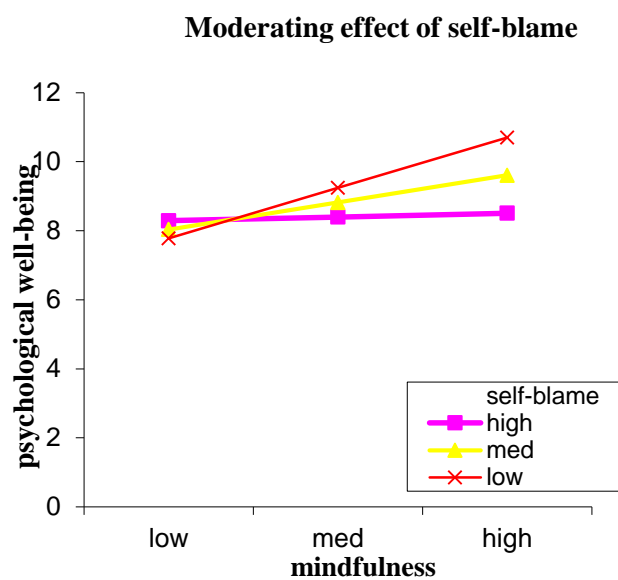


Figure 31. Moderating effect of self-blame in predicting psychological well-being among Hepatitis C. patients

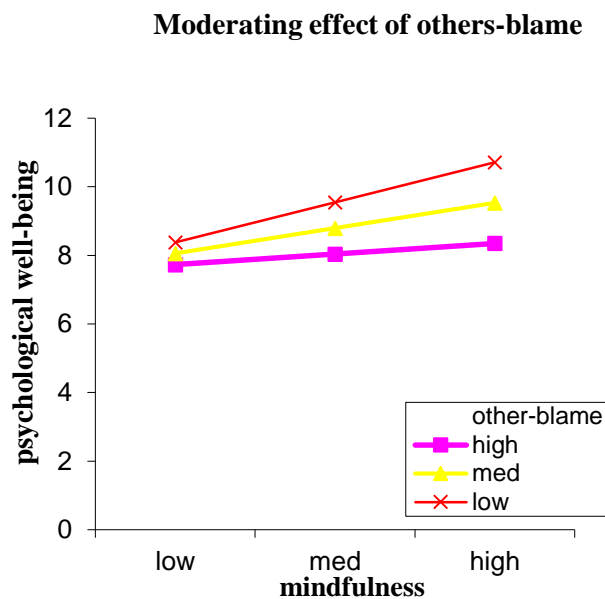


Figure 32. Moderating effect of others-blame in predicting psychological well-being among Hepatitis C. patients

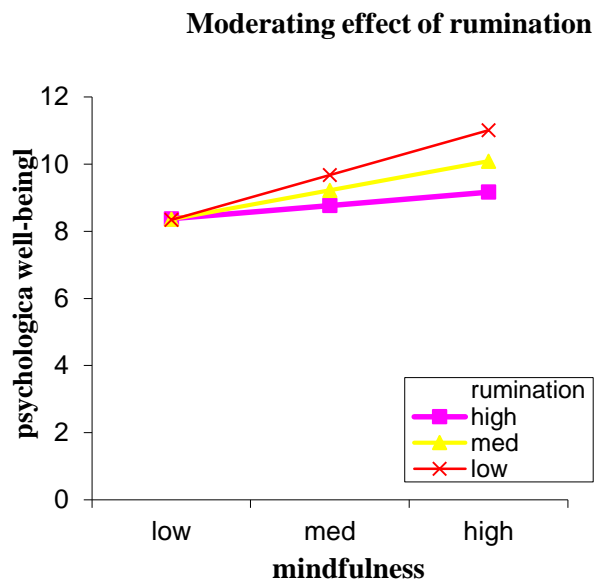


Figure 33. Moderating effect of rumination in predicting psychological well-being among Hepatitis C. patients

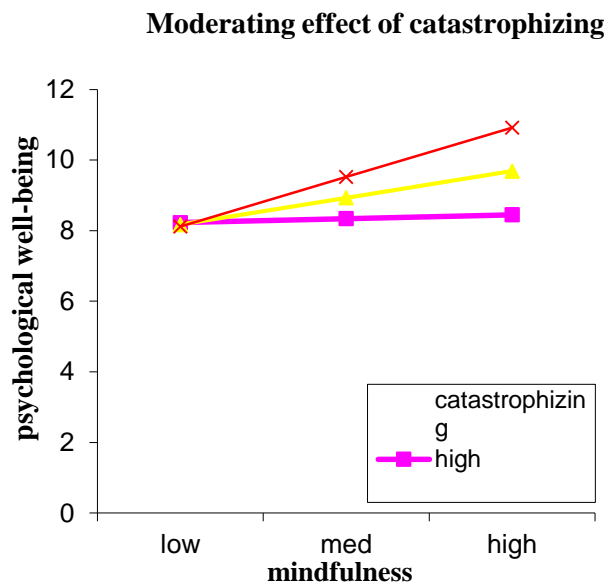


Figure 34. Moderating effect of catastrophizing in predicting psychological well-being among Hepatitis C. patients

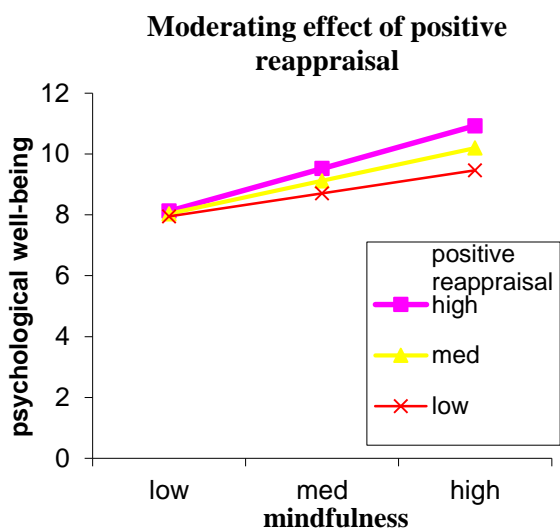


Figure 35. Moderating effect of positive reappraisal in predicting psychological well-being among Hepatitis C. patients

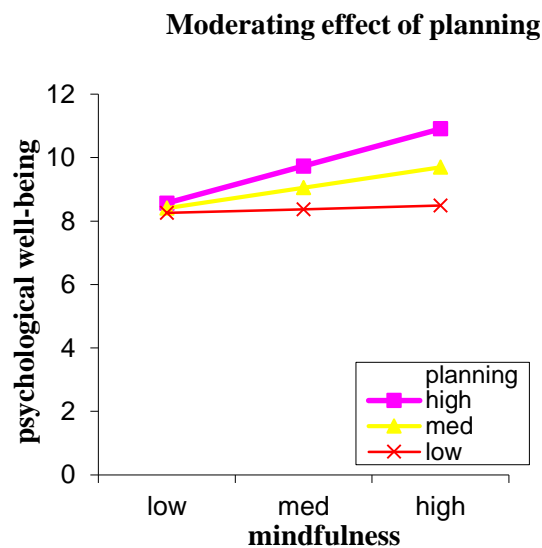


Figure 36. Moderating effect of planning in predicting psychological well-being among Hepatitis C. patients

Table 19 exhibits the results for moderating role of cognitive emotion-regulation in relationship between mindfulness and psychological well-being among hepatitis C. patients. Presenting the moderating role of self-blame. Model 1 portrays significant interaction effect of self-blame and mindfulness ( $B = -.11$ ,  $R^2 = .34$ ,  $F = 44.45$ ,  $p < .001$ ) in explaining psychological well-being. **Serving as a threat factor, self-blame diluted the impact of mindfulness on the level of psychological well-being.** Mod graph (Figure 31) also describes that medium and low level of self-blame increased the power of mindfulness on psychological well-being; on the other hand, when the ability was at high level it boosted the effect of self-blame and buffered the effect of mindfulness on psychological wellbeing.

Model 2 indicates moderating power of other-blame in association of the mindfulness and psychological well-being. Interaction term between other-blame and mindfulness disclose a significant moderation influence ( $B = -.08$ ,  $R^2 = .35$ ,  $F = 46.13$ ,  $p < .001$ ) of other-blame along with generating 35% of variance in psychological well-being. Mod graph (Figure 32) further elucidates these outcomes that when other-blame among hepatitis C. patients enlarged its impression mindfulness reduced its effect on psychological well-being.

Model 3 in the table expounds the moderating influence of rumination. Discoveries disclose that the interaction effect of rumination and mindfulness was statistically significant ( $B = -.07$ ,  $R^2 = .32$ ,  $F = 39.91$ ,  $p < .001$ ) with explaining 32% of variance in hepatitis C. patients' psychological well-being. Graphical presentation of these outcomes (Figure 33) elucidate these conclusions by proposing that all levels of rumination raised its influence on psychological well-being. While in result mindfulness decreased its effect on psychological wellbeing among patients.

Model 4 explains outcomes for moderating influence of catastrophizing. Outcomes expose that catastrophizing significantly moderated ( $B = -.10$ ,  $R^2 = .34$ ,  $F = 43.29$ ,  $p < .001$ ) the relationship between mindfulness and hepatitis C. patients' psychological well-being along with accounting for 34% of variance. Line graph (Figure 34) clarifies that increase in catastrophizing boosted its impact on hepatitis C. patients' psychological well-being. Mindfulness buffered its effect on psychological wellbeing in presence of catastrophizing.

Model 5 and 6 of the table highlights the moderation effect of putting into perspective and positive refocusing. Values of the interaction term express that putting into perspective and positive refocusing did not significantly moderated the effect of mindfulness.

Results for moderation power of positive reappraisal are specified in model 7 of the table. The interaction term recommends that positive reappraisal significantly moderated ( $B = .06$ ,  $R^2 = .33$ ,  $F = 41.43$ ,  $p < .001$ ) the effect of mindfulness on psychological well-being, along with accounting for 33% of variance. These outcomes are further expounded through a graphical presentation (Figure 35) which portrays that all levels of positive refocusing maximized the power of mindfulness on hepatitis C. patients' psychological well-being.

Model 8 displays the results for moderating effect of acceptance. Values revealed no significant interaction effect of acceptance and mindfulness. Model 9 represents outcomes for moderation effect of planning. Results expose that planning significantly moderated ( $B = .08$ ,  $R^2 = .31$ ,  $F = 38.05$ ,  $p < .001$ ) the relationship between mindfulness and hepatitis C. patients' psychological well-being along with accounting for 31% of variance. The graph of moderation (Figure 36) explains these outcomes with at different levels of planning. Slopes of the graph portray that high and medium level of planning augmented the effect of mindfulness on

psychological well-being. While low significant change was witnessed when planning was at low level.

**Table 20**

*Moderating effect of Social support on Over identified among hepatitis C. patients (N=260)*

Variables	Psychological well-being				
	B	SE B	T	P	95% CI
Constant	8.02	4.96	1.62	.11	[-1.75, 17.79]
OI	-.02	.26	-.09	.93	[-.55, .50]
SSA	.56	.32	1.75	.08	[-.07, 1.19]
OI x SSA	-.02	.02	-1.24	.22	[-.06, .01]
R <sup>2</sup>	.26				
F	30.61			.00	
Constant	14.51	3.94	3.68	.00	[6.75, 22.27]
OI	-.38	.22	-1.75	.08	[-.81, .05]
SSB	.40	.42	.95	.34	[-.43, 1.24]
OI x SSB	-.01	.02	-.58	.58	[-.06, .03]
R <sup>2</sup>	.26				
F	29.56			.00	
Constant	15.48	2.47	6.27	.00	[10.62, 20.35]
OI	-.31	.14	-2.14	.03	[-.59, -.02]
SSC	.37	.27	1.40	.16	[-.15, .89]
OI	-.03	.02	-1.70	.09	[-.06, .01]
OI x SSC					
R <sup>2</sup>	.25				
F	29.07			.00	

p>.05= Non-significant, \*\*\*p < .001

*Note:* OI=over-identified; SSA= confidants/ family (group A); SB= peers (group B); SSC= experts (official help providers/ supervisors – group C); WHO= WHO (five) well-being index

Outcomes obtained in Table (20) display the moderating role of social support (i.e. family, peers, official help providers/ supervisors) in the association between over-identified and psychological well-being among hepatitis C. patients. Model 1, 2 and 3 demonstrates that the interaction term revealed no significant interaction effect of social support (i.e. family, peers, official help providers/ supervisors) and over-identified.



**Table 21**

*Moderating effect of Cognitive emotion regulation on Over identified among hepatitis C. patients (N=260)*

Variables	Psychological well-being				
	B	SE B	t	P	95% CI
Constant	30.57	3.49	8.75	.00	[23.69, 37.44]
OI	-1.12	.21	-5.36	.00	[-1.53, -.71]
SB	-2.16	.55	-3.92	.00	[-3.24, -1.07]
OI x SB	.11	.03	3.49	.001	[.05, .17]
R <sup>2</sup>	.29				
F	36.03			.00	
Constant	25.95	7.46	7.46	.00	[19.11, 32.80]
OI	-.73	-3.43	-3.43	.001	[-1.15, -.31]
OB	-1.57	-2.88	-2.88	.004	[-2.65, -.49]
OI x OB	.06	1.89	1.89	.06	[-.01, .12]
R <sup>2</sup>	.32				
F	39.46			.00	
Constant	26.75	3.52	7.61	.00	[19.82, 33.66]
OI	-.86	.21	-4.09	.00	[-1.28, -.45]
RM	-1.4	.56	-2.92	.003	[-2.74, -.53]
OI x RM	.08	.03	2.39	.02	[.013, .14]
R <sup>2</sup>	.53				
F	34.41			.00	
Constant	30.18	4.06	7.43	.00	[22.18, 38.19]
OI	-1.05	.24	-4.41	.00	[-1.51, -.58]
CT	-2.05	.62	-3.31	.001	[-3.26, -.83]
OI x CT	.09	.03	2.81	.01	[.03, .17]
R <sup>2</sup>	.29				
F	36.29			.00	
Constant	11.26	2.54	4.42	.00	[6.24, 16.27]
OI	-.23	.14	-1.57	.12	[-.50, .05]
PIP	1.03	.48	2.12	.03	[.07, 1.98]
OI x PIP	-.03	.03	-.88	.38	[-.08, .03]
R <sup>2</sup>	.31				
F	39.23			.00	
Constant	10.46	2.42	4.31	.00	[5.68, 15.25]
OI	-.17	.13	-1.32	.19	[-.44, .08]
PRF	1.09	.45	2.42	.02	[.20, 1.98]
OI x PRF	-.03	.03	-1.06	.29	[-.08, .02]
R <sup>2</sup>	.32				
F	41.68			.00	
Constant	10.58	2.38	4.44	.00	[5.89, 15.27]
OI	-.15	.13	-1.16	.25	[-.42, .10]
PRA	1.27	.43	2.92	.003	[.41, 2.13]
OI x PRA	-.15	.02	-1.90	.06	[-.10, .001]
R <sup>2</sup>	.30				
F	36.57			.00	
Constant	18.08	4.32	4.18	.00	[9.56, 26.60]
OI	-.45	.23	-1.94	.05	[-.92, .01]
AT	.17	.52	.32	.74	[-.86, 1.21]
OI x AT	-.02	.03	-.62	.54	[-.08, .04]
R <sup>2</sup>	.24				
F	28.02			.00	

Constant	7,62	4.90	51.55	.12	[-2.03, 17.29]
OI	-.04	.26	-.16	.87	[-.56, .47]
PN	1.08	.60	1.78	.08	[-.11, 2,28]
OI x PN	-.03	.03	-1.09	.27	[-.10, .02]
R <sup>2</sup>	.29				
F	35.08			.00	

p>.05= Non-significant, \*\*\*p < .001

Note: OI=over-identified; SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning; WHO= WHO (five) well-being index

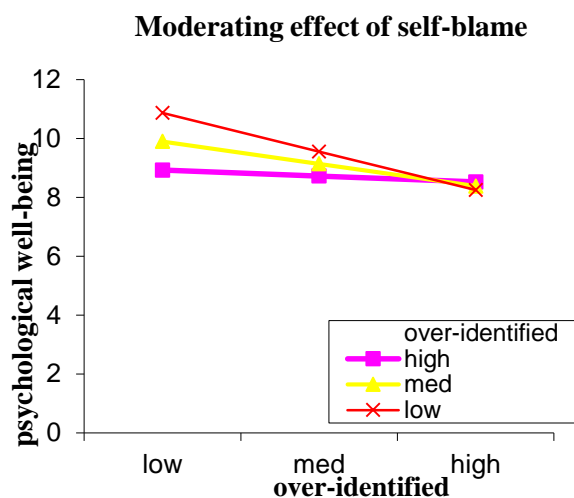


Figure 37. Moderating effect of self-blame in predicting psychological well-being among Hepatitis C. patients

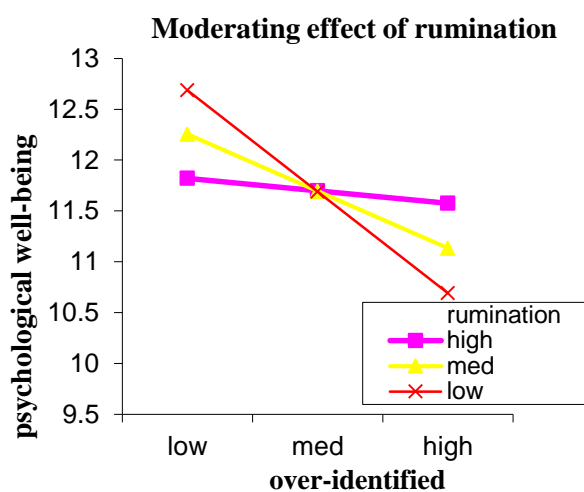


Figure 38. Moderating effect of rumination in predicting psychological well-being among Hepatitis C. patients

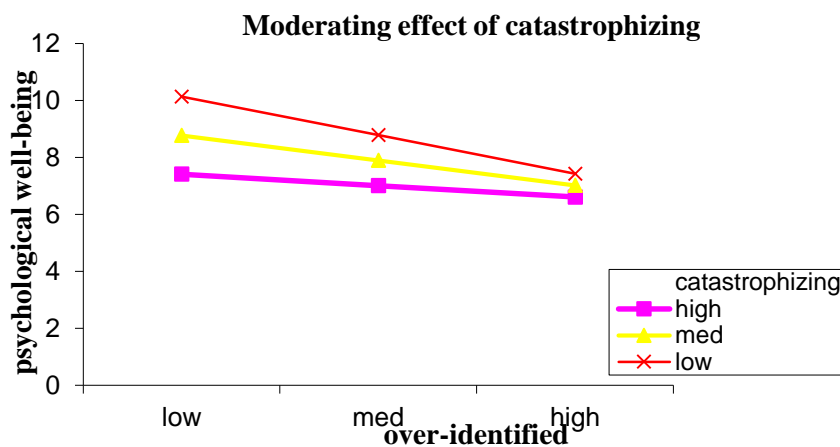


Figure 39. Moderating effect catastrophizing in predicting psychological well-being among Hepatitis C. patients

Table 21 shows the results for moderating role of cognitive emotion-regulation in relationship between over-identified and psychological well-being among hepatitis C. patients. Displaying the moderating role of self-blame Model 1 portrays significant interaction effect of self-blame and over-identified ( $B = .11$ ,  $R^2 = .29$ ,  $F = 36.46$ ,  $p < .001$ ) in explaining psychological well-being. **Serving as a risk factor, self-blame along with over-identified buffered the impact of psychological well-being.** Mod graph (Figure 37) also explains this pattern at different levels.

Model 2 indicates moderating power of other-blame in association with over-identified and psychological well-being. Interaction term between other-blame and over-identified reveal no significant moderation effect of other-blame on psychological well-being.

Model 3 in the table expounds the moderating effect of rumination. Conclusions disclose that the interaction effect of rumination and over-identified was statistically significant ( $B = .08$ ,  $R^2 = .53$ ,  $F = 34.41$ ,  $p < .001$ ) in explaining psychological well-being. Rumination and over-identified reduced psychological well-being. Mod graph (Figure 38) also explicates this pattern of connection by demonstrating that all levels of rumination and over-identified declined psychological well-being among patients.

Model 4 denotes the outcomes for moderation power of catastrophizing. Figures expose that catastrophizing significantly moderated ( $B = .09$ ,  $R^2 = .29$ ,  $F = 36.29$ ,  $p < .001$ ) the relationship between over-identified and hepatitis C. patients' psychological well-being along with accounting for 29% of variance. Line graph (Figure 39) clarifies that increase in catastrophizing buffer the power of over-identified on hepatitis C. patients' psychological well-being. **High, medium and low level of the catastrophizing also demonstrated the same trend in expounding this effect.**

As far Model 5, 6, 7, 8 and 9 (putting into perspective, positive refocusing, positive reappraisal, acceptance and planning) are concerned, results divulge that these abilities did not accounted for significant moderation in the relationship between over-identified and psychological well-being among hepatitis C. patients.

**Table22**

*Means, Standard deviations and t values of Study Variables based on Gender (N=260)*

Variables	Males (n= 131)		Females (n=129)		t	p	95%CI		Cohen's d
	M	SD	M	SD			LL	UL	
SK	9.12	3.36	8.58	2.59	1.45	.15	-.19	1.27	0.18
SJ	18.95	3.06	18.70	3.95	.57	.57	-.61	1.11	0.07
CH	8.02	3.69	9.36	4.46	-2.65	.01	-2.34	-.34	0.33
IS	15.37	3.57	14.43	4.33	1.89	.06	-.04	1.90	0.24
MF	7.84	3.37	8.26	3.49	-.98	.33	-1.26	.42	0.12
OI	17.86	2.58	17.19	3.01	1.95	.05	-.01	1.36	0.24
SSA	9.06	3.36	9.39	4.06	-.71	.48	-1.24	.58	0.89
SSB	9.09	1.77	8.14	2.03	4.04	.00	.49	1.42	0.49
SSC	7.05	2.50	6.79	2.07	.92	.36	-.29	.82	0.11
SB	7.52	1.80	7.96	1.75	-2.01	.05	-.88	-.01	0.25
OB	7.41	1.68	7.71	1.42	-1.56	.12	-.68	.08	0.19
RM	8.18	2.09	8.34	1.79	-.69	.49	-.64	.31	0.08
CT	8.11	1.99	8.29	1.75	-.74	.46	-.63	.27	0.09
PIP	3.58	1.73	3.31	1.24	1.45	.145	-.09	.64	0.18
PRF	3.46	1.85	2.94	1.38	2.57	.01	.12	.92	0.32
PRA	3.73	1.78	3.43	1.29	1.51	.13	-.09	.67	0.19
AT	4.62	1.99	4.91	1.61	-1.32	.19	-.74	.15	0.16
PN	5.21	1.74	5.74	2.08	-2.20	.03	-.99	-.06	0.28
WHO	9.27	2.85	9.33	3.06	-.16	.87	-.78	.66	0.02

\*\* $p < .001$ , .01, \* $p < .05$ , Non-significant =  $p > .05$

*Note:* SK= self-kindness; SJ= self-judgment; CH= common humanity; IS= isolation; MF= mindfulness; OI= over-identified; SSA= the confidants/family (group A); SSB= peers (group B); SSC= experts (official help providers/supervisors – group C); SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning; WHO= WHO (five) well-being index

Table 22 displays gender variances for study variables. Figures in the table direct that self-kindness and self-judgment did not make any significant gender difference in the sample. Effect of

common humanity was significantly higher on females as compared to males ( $p = .01$ ). For isolation, mindfulness, over-identified and family social support; no significant gender differences occurred in the sample. For peer social support, males showed significantly higher gender differences as compared to females ( $p = .00$ ) whereas females scored significantly higher on self-blame and planning. As far positive refocusing is concerned, males committed significantly greater number of differences than females. On some cognitive-emotion regulation domains (i.e., other-blame, rumination, catastrophizing, putting into perspective, positive reappraisal, acceptance) and psychological well-being; no significant differences appeared between males and females.

**Table 23**

*Means, SDs and t values of Study Variables based on family system (N=260)*

Variables	Joint (n= 133)		Nuclear (n=127)		T	p	95%CI		Cohen's d
	M	SD	M	SD			LL	UL	
SK	8.07	3.35	9.68	2.35	-4.47	.00	-2.32	-.90	0.56
SJ	18.98	18.65	3.89	3.13	.76	.45	-.53	1.19	1.13
CH	8.87	4.08	8.50	4.20	.73	.46	-.64	1.39	0.09
IS	14.93	4.07	14.87	3.91	.12	.91	-.92	1.03	0.02
MF	8.60	3.87	7.46	2.82	2.70	.007	.31	1.97	0.34
OI	17.45	3.18	17.61	2.39	-.44	.66	-.84	.53	0.06
SSA	9.33	4.27	9.11	3.04	.48	.63	-.69	1.13	0.06
SSB	8.55	2.12	8.69	1.77	-.59	.55	-.62	.34	0.07
SSC	7.32	2.38	6.51	2.14	.11	.005	.25	1.36	0.36
SB	8.03	1.97	7.43	1.53	.01	.01	.17	1.03	0.34
OB	7.73	1.75	7.39	1.31	.003	.08	-.04	.72	0.22
RM	8.29	2.03	8.22	1.86	.26	.76	-.40	.55	0.04
CT	8.25	1.93	8.15	1.82	.18	.58	-.27	.47	0.05
PIP	3.50	1.67	3.39	1.33	.18	.58	-.27	.47	0.07
PRF	3.35	1.83	3.05	1.43	.01	.15	-.10	.70	0.18
PRA	3.63	1.76	3.53	1.32	.04	.59	-.27	.49	0.06
AT	5.44	2.01	4.06	1.25	.00	.00	.96	1.78	0.82
PN	5.97	1.82	4.95	1.91	.19	.00	.56	1.47	0.55
WHO	9.39	3.29	9.20	2.56	.26	.59	-.53	.92	0.06

\*\* $p < .001$ , .01, \* $p < .05$ , Non-significant =  $p > .05$

*Note:* SK= self-kindness; SJ= self-judgment; CH= common humanity; IS= isolation; MF= mindfulness; OI= over-identified; SSA= the confidants/family (group A); SSB= peers (group B); SSC= experts (official help

providers/supervisors – group C); SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning; WHO= WHO (five) well-being index

Table 23 above demonstrates group variances on tested variables based on family system. Results direct that effect of self-kindness was significantly higher on patients for nuclear family system as associated with patients from joint family system ( $p < .01$ ). Outcomes further disclose that patient belongs to joint family system had significantly higher impact of self-blame, acceptance and planning ( $p < .05$ ) than patients of nuclear family system. Though, for rest of the domains of self-compassion, psychological well-being, cognitive emotion regulation and social support, no significant differences occurred between the two groups.

**Table 24**

*Means and Standard Deviations and Summary Statistics for ANOVA of Age for Study Variables (N = 260)*

Variables	Young (n=80)		Middle (n=130)		Late (n=50)		$\eta^2$	F
	M	SD	M	SD	M	SD		
SK	10.63	3.12	8.04	2.81	6.31	1.01	.19	27.31**
SJ	18.83	2.34	18.25	4.28	21.88	.50	.06	7.56*
CH	7.99	4.02	9.48	4.67	6.81	.75	.04	4.76*
IS	14.91	4.04	14.88	4.67	13.44	1.75	.01	.89
MF	7.53	3.69	8.53	3.67	6.94	.25	.03	2.85
OI	17.29	2.65	17.24	3.16	19.06	.25	.03	2.94
SSA	9.03	3.87	9.72	4.05	7.31	1.25	.03	3.09*
SSB	8.79	1.78	8.47	1.96	8.06	2.11	.01	1.25
SSC	7.20	2.46	7.05	2.11	5.31	1.25	.05	5.08*
SB	6.90	1.87	8.13	1.84	7.94	1.12	.09	11.59**
OB	6.89	1.74	7.85	1.54	7.81	1.11	.08	9.51**
RM	7.56	2.18	8.47	1.93	8.88	1.26	.06	6.25**
CT	7.55	2.16	8.39	1.78	8.69	1.45	.05	5.64**
PIP	3.73	2.06	3.34	1.32	3.06	.57	.02	1.99
PRF	3.53	2.24	3.06	1.45	3.25	.78	.02	1.75
PRA	4.01	2.06	3.40	1.38	3.31	.79	.03	3.79*
AT	4.65	2.04	5.07	1.83	4.00	.00	.03	3.07*
PN	5.03	1.88	5.75	2.07	6.13	.500	.04	4.28*
WHO	9.20	3.15	9.28	3.21	8.69	1.25	.002	.26

\*\* $p < .001$ , .01, \* $p < .05$ , Non-significant =  $p > .05$

*Note:* SK= self-kindness; SJ= self-judgment; CH= common humanity; IS= isolation; MF= mindfulness; OI= over-identified; SSA= the confidants/family (group A); SSB= peers (group B); SSC= experts (official help providers/supervisors – group C); SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing;

PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning; WHO= WHO (five) well-being index

One-way ANOVA was calculated (Table 24) to inspect mean variances between three age groups (young, middle & late adults) on study variables containing self-compassion, psychological well-being, cognitive-emotion regulation and social support. Model 1 from table 24 displays significant age variances on some self-compassion domains. Separate univariate analyses also explained these significant variances ( $p < .05$ ) between young, middle and late adults on self-kindness  $F(2, 223) = 27.31, p < .001$ , self-judgment  $F(2, 223) = 7.56, p < .05$  and common humanity  $F(2, 223) = 4.76, p < .05$ . Nonetheless, univariate analysis submitted a non-significant influence of age across three groups on isolation  $F(2, 223) = .86, p < .001$  mindfulness  $F(2, 223) = 2.85, p < .001$  and over-identification  $F(2, 223) = 2.94, p < .001$ .

Model 2 demonstrates outcomes of significant multivariate effects of age on social support among adults. Separate univariate analyses validated these outcomes by suggesting significant differences on family group of social support  $F(2, 223) = 3.09, p < .05$  and official help providers group  $F(2, 223) = 5.08, p < .05$  among young, middle and late adult age groups. Though univariate analysis endorsed a non-significant influence of age on peers group  $F(2, 223) = 1.25, p < .001$  across three groups.

Last model exposes multivariate effect of age for cognitive-emotion regulation domains. Values propose significant effect of age on cognitive-emotion regulation. Univariate analysis revealed significant mean difference for self-blame  $F(2, 223) = 11.59, p < .001$ , other-blame  $F(2, 223) = 9.51, p < .001$ , rumination  $F(2, 223) = 6.25, p < .001$ , catastrophizing  $F(2, 223) = 5.64, p < .001$ , positive reappraisal  $F(2, 223) = 3.79, p < .05$ , acceptance  $F(2, 223) = 3.07, p < .05$ , and planning  $F(2, 223) = 4.28, p < .05$ , across different age groups; although no significant age

variances occurred for only putting into perspective, positive refocusing and psychological well-being.

**Table 25**  
*Post Hoc Analyses for Mean Differences in study variables across different Age Groups (N=260)*

Variable	(I) Age Groups	(J) Age groups	Mean Difference (I-J)	SE	P	95% CI	
						LL	UL
SK	young	middle	2.58	.40	.00	1.63	3.54
		late	4.31	.77	.00	2.48	6.15
	middle	late	1.72	.75	.05	-.05	3.50
SJ	young	middle	.57	.50	.48	-.61	1.77
		late	-3.05	.97	.01	-5.34	-.76
	middle	late	-3.62	.93	.00	-5.84	-1.42
SSA	young	middle	-.69	.54	.41	-1.98	.60
		late	1.71	1.05	.23	-.78	4.20
	middle	late	2.40	1.02	.05	-.01	4.81
SSC	young	middle	.15	.31	.87	-.58	.89
		late	1.88	.60	.01	.47	3.31
	middle	late	1.73	.58	.01	.36	3.11
SB	young	middle	-1.23	.25	.00	-1.84	-.62
		late	-1.03	.49	.09	-2.21	.13
	middle	late	.19	.48	.91	-.94	1.33
OB	young	middle	-.96	.22	.00	-1.50	-.43
		late	-.92	.43	.08	-1.95	.10
	middle	late	.04	.42	.99	-.95	1.03
RM	young	middle	-.90	.28	.004	-1.57	-.24
		late	-1.31	.54	.04	-2.59	-.03
	middle	late	-.40	.52	.72	-1.64	.83
CT	young	middle	-.84	.27	.01	-1.48	-.20
		late	-1.13	.52	.07	-2.37	.09
	middle	late	-.29	.50	.82	-1.48	.89
PRA	young	middle	.61	.23	.02	.07	1.16
		late	.70	.44	.26	-.35	1.75
	middle	late	.08	.43	.97	-.93	1.11
AT	young	middle	-.41	.26	.25	-1.04	.20
		late	.65	.50	.40	-.54	1.84
	middle	late	1.06	.49	.07	-.09	2.23
PN	young	middle	-.72	.27	.02	-1.37	-.07
		late	-1.10	.53	.09	-2.35	.15
	middle	late	-.37	.51	.74	-1.59	.83

\*\* $p < .001$ , .01, \* $p < .05$ , Non-significant =  $p > .05$

*Note:* SK= self-kindness; SJ= self-judgment; SSA= the confidants/family (group A); SSC= experts (official help providers/supervisors – group C); SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PRA= positive reappraisal; AT= acceptance; PN= planning



Table 25 demonstrates Tukey HSD post hoc outcomes for variances among age groups on study variables. Values direct that mean scores of self-kindness were significantly different between young and middle adults ( $p < .01$ ) and between young and late groups ( $p < .001$ ) but not between middle and late groups ( $p > .05$ ). Significant mean variances were explored among middle and late adults ( $p < .05$ ) young and late adult groups ( $p < .01$ ) for self-judgment. Table illustrates significant age differences for expert group of social support also. Values display that social support from experts or supervisors significantly differed between young and late adult groups ( $p < .05$ ) and between middle and late age groups ( $p < .05$ ) but not between young and middle age groups ( $p > .05$ ). As far self-blame is concerned, statistically significant age differences occurred between young and middle adults ( $p < .001$ ). However young and late groups and middle and late age groups did not differ significantly on self-blame ( $p > .05$ ). Similar pattern occurred for other-blame as significant differences were shown between young and middle adults groups ( $p < .001$ ) but not between young and late age groups ( $p > .05$ ) and between middle and late adult groups ( $p > .05$ ). Values direct that mean scores of rumination were statistically significantly different between young and middle groups of adults ( $p < .05$ ) and between young and late groups ( $p < .001$ ) but not between middle and late age groups ( $p > .05$ ). As far catastrophizing and planning are concerned, statistically significant age differences occurred between young and middle adults ( $p < .001$ ), ( $p < .05$ ). However young and late groups and middle and late age groups did not differ significantly on catastrophizing ( $p > .05$ ) and planning ( $p > .05$ ). Same pattern occurred for positive reappraisal as significant differences were shown between young and middle adults groups ( $p < .05$ ) but not between young and late age groups ( $p > .05$ ) and between middle and late adult groups ( $p > .05$ ).

**Table 26**

*Means, Standard Deviations and Summary Statistics for Multivariate Analysis of marital status for Study Variables (N = 260)*

Variables	Unmarried (n=85)		Married (n=134)		Other (n=41)		$\eta^2$	F
	M	SD	M	SD	M	SD		
SK	10.78	2.63	7.66	2.71	8.76	2.64	.22	35.24**
SJ	19.45	2.25	18.33	4.29	19.15	2.65	.02	2.85
CH	7.86	3.69	9.35	4.68	8.24	2.45	.03	3.74*
IS	15.33	3.82	14.47	4.41	15.44	2.46	.01	1.65
MF	7.49	3.04	14.47	4.41	7.90	3.29	.02	2.03
OI	17.53	1.97	17.39	3.12	17.98	3.22	.01	.68
SSA	8.73	3.46	9.43	4.06	9.59	2.89	.01	1.14
SSB	8.69	1.71	8.53	2.07	8.76	2.04	.002	.30
SSC	7.00	2.07	6.81	2.21	7.12	2.95	.003	.35
SB	8.08	1.82	7.88	1.20	7.74	1.78	.06	7.93**
OB	7.06	1.65	7.83	1.51	7.73	1.26	.05	6.92**
RM	7.85	2.15	8.38	1.83	8.71	1.69	.03	3.32*
CT	7.73	2.07	8.36	1.76	8.66	1.62	.03	4.50*
PIP	3.67	1.89	3.26	1.28	3.59	1.18	.02	2.14
PRF	3.52	2.06	3.05	1.41	3.02	1.31	.02	2.36
PRA	3.89	1.90	3.38	1.34	3.59	1.30	.02	2.87
AT	4.58	1.71	5.06	1.81	4.20	1.86	.03	4.35*
PN	4.82	1.67	6.00	1.95	8.88	2.82	.08	11.48**
WHO	9.30	3.16	10.15	2.29	9.30	2.95	.02	2.56

\*\* $p < .001$ , .01, \* $p < .05$ , Non-significant =  $p > .05$

*Note:* SK= self-kindness; SJ= self-judgment; CH= common humanity; IS= isolation; MF= mindfulness; OI= over-identified; SSA= the confidants/family (group A); SSB= peers (group B); SSC= experts (official help providers/supervisors – group C); SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; PIP=putting into perspective; PRF=positive refocusing; PRA= positive reappraisal; AT= acceptance; PN= planning; WHO= WHO (five) well-being index

One-way ANOVA was calculated (Table 26) to inspect mean differences among different marital status groups (unmarried, married & other) on study variables including self-compassion, psychological well-being, cognitive-emotion regulation and social support. Model 1 of the table displays statistically significant marital status differences on some self-compassion domains. Separate univariate analyses further established these significant differences ( $p < .05$ ) between unmarried, married and patients having other marital status on self-kindness  $F(2, 257) = 35.24$ ,  $p < .001$ , and common humanity  $F(2, 257) = 3.74$ ,  $p < .05$ . However, univariate analysis submitted

a non-significant effect of marital status on self-kindness, isolation, mindfulness and over-identification across three groups.

Model 2 demonstrates outcomes of multivariate effects of marital status on social support among patients. Separate univariate analyses explain these outcomes by suggesting no significant differences on all groups of social support (i.e., family, peers, experts or supervisors) across three groups.

Last model of the table exposes multivariate effect of marital status for cognitive-emotion regulation domains. Univariate analysis revealed significant mean difference for self-blame  $F(2, 257) = 7.93, p < .001$ , other-blame  $F(2, 257) = 6.92, p < .001$ , rumination  $F(2, 257) = 63.32, p < .05$ , catastrophizing  $F(2, 257) = 4.50, p < .05$ , acceptance  $F(2, 257) = 4.35, p < .05$ , and planning  $F(2, 257) = 11.48, p < .001$ , across different marital status groups whereas no significant age differences occurred for only putting into perspective, positive refocusing, positive reappraisal and psychological well-being.

**Table 27**

*Post Hoc Analyses for Mean Differences in study variables across different marital status groups (N=260)*

Variable	(I) Age groups	(J) Age groups	Mean Difference (I-J)	SE	P	95% CI	
						LL	UL
SK	Unmarried	Married	3.11	.37	.00	2.24	3.99
		Other	2.02	.50	.00	.82	3.22
	Married	Other	-1.09	.47	.05	-2.22	.03
CH	Unmarried	Married	-1.49	.56	.02	-2.83	-.15
		Other	-.38	.77	.87	-2.22	1.45
	Married	Other	1.10	.73	.28	-.62	2.83
SB	Unmarried	Married	.95	.24	.00	.38	1.52
		Other	.20	.31	.78	-.53	.94
	Married	Other	.20	.31	.78	-.53	.94
OB	Unmarried	Married	-.77	.21	.001	-1.27	-.27
		Other	-.67	.29	.06	-1.36	.01

	Married	Other	.09	.27	.93	-.55	.74
RM	Unmarried	Married	-.53	.26	.11	-1.16	.10
		Other	-.86	.36	.05	-1.72	.00
	Married	Other	-.32	.34	.60	-1.14	.48
CT	Unmarried	Married	-.62	.25	.03	-1.23	-.02
		Other	-.92	.35	.02	-1.76	-.10
	Married	Other	-.30	.33	.63	-1.08	.48
AT	Unmarried	Married	.48	.24	.12	-.10	1.07
		Other	.86	.32	.02	.11	1.62
	Married	Other	-.38	.34	.50	-1.18	.42
PN	Unmarried	Married	-1.17	.25	.00	-1.78	-.57
		Other	-.27	.35	.71	-1.10	.56
	Married	Other	.90	.33	.02	.12	1.68

\*\* $p < .001$ , .01, \* $p < .05$ , Non-significant =  $p > .05$

*Note:* SK= self-kindness; CH= common humanity; SB=self-blame; OB=other-blame; RM=rumination; CT=catastrophizing; AT= acceptance; PN= planning

Table 27 demonstrates Tukey HSD post hoc results for differences between different marital status groups on study variables. Values direct that mean scores of self-kindness were statistically significantly different between unmarried and married groups of patients ( $p < .01$ ) and between unmarried and other (having other marital status) groups ( $p < .001$ ) but not between married and other age groups ( $p > .05$ ). For common humanity, significant mean differences were found between unmarried and married patients ( $p < .05$ ) but not between unmarried and other groups and married and other groups ( $p > .05$ ). Post hoc table shows significant age differences for self-blame and other blame also. Values display that self-blame and other-blame significantly differed between unmarried and married patients groups ( $p < .05$ ) but not between unmarried and other groups and married and other groups ( $p > .05$ ). As far catastrophizing is concerned, statistically significant marital status differences occurred between unmarried and married groups and unmarried and other groups ( $p < .05$ ). However married and other groups and did not differ significantly on catastrophizing ( $p > .05$ ). Values direct that mean score of acceptance was statistically significantly different between unmarried and other groups of patients ( $p < .05$ ) but not between unmarried and married groups and married and other groups ( $p > .05$ ). As far planning

is concerned, statistically significant marital status differences occurred between young and middle adults ( $p < .001$ ), ( $p < .05$ ). However young and late groups and middle and late age groups did not vary significantly on catastrophizing ( $p > .05$ ) and planning ( $p > .05$ ). Same patterns occurred for positive reappraisal as significant variances were exposed among unmarried and married groups ( $p < .001$ ) and married and other groups ( $p < .05$ ) but not between unmarried and other groups.

## Discussion

Present study added to the stream of research centering on psychological wellbeing of hepatitis C. patients and is the first attempt to outspread the positive impact of self-compassion on psychological wellbeing of hepatitis C. patients. This research was also intended to scrutinize the influence of cognitive-emotional regulation, social support and psychological wellbeing among patients with hepatitis C. Research further engaged to find the moderating effect of cognitive-emotional regulation and social support.

The study was carried out in three phases. First phase comprised of the translation of English version of Self-Compassion Scale (SCS), and Multidimensional Social Support Scale (MDSS) into Urdu language through backward translation method. Second phase contained pilot study. Pilot study ( $N=50$ ) phase was directed to determine the psychometric properties of all study scales. The third phase was the main study with sample of 260 hepatitis C. patients. Some demographic variables (i.e., gender, age, family system, & marital status) were also discovered in relation to self-compassion, cognitive-emotional regulation, social support and psychological wellbeing. Results delivered the empirical support for the objectives and hypotheses of present study.

First, psychometric properties of all study measures (i.e., Self-compassion scale, WHO-(five) wellbeing index, Cognitive-emotional regulation questionnaire, Multidimensional social support scale) were established on main study sample ( $N = 260$ ). Sample was collected from different hospitals of Rawalpindi, Islamabad and Attock. Results (see table 8) depicted that almost all the scales (self-kindness, self-judgment, common humanity, isolation, mindfulness, over-identified, social support from family, social support from peers, self-blame, blaming others, rumination, catastrophizing, planning, positive reappraisal, positive refocusing, acceptance &

putting into perspective) are significantly correlated with each other except social support from supervisors. Scales were internally consistent and normally distributed as per desired direction. Multiple regression analysis was processed to study the influence of self-compassion, psychological wellbeing, cognitive-emotional regulation and social support on patients with hepatitis C.

Breathing with hepatitis C virus doesn't just effect liver. It also disturb your mental health. Hepatitis C. patients are at greater risk for mental health concerns compared with people in general population. Adinolfi and his fellows published a review in august 2017, noted that one third of the hepatitis C. patients suffered from depression. Some people also face mood changes, irritation, anxiety, loneliness, sleep problems, psychosis etc. (Hughes, Bassi, Gilbody, Bland, & Martin, 2016). Plenty of emotional and psychosocial stressors contributes in low psychological wellbeing as well (El-Kader, Al-Jiffri, & Al-Shreef, 2014). Mental health management is essential in these cases.

Neff (2003) explained self-compassion as to treat oneself with care and kindness in times of suffering or struggle. It is actively defined as protective factor that helps in decreasing the negative mental conditions like anxiety, depression, loneliness or stress etc. (Játiva, & Cerezo, 2014; Westphal, et al., 2015; Bluth, et al., 2016). Previous researches claimed that enriched self-compassion skills (through self-kindness, mindfulness and common humanity) and more use of coping techniques like looking for social support or adopting positive refocusing , are linked with better results in Chronic Physical Health Conditions (Allen & Leary, 2010; Sirois & Rowse, 2016), including reduced stress. When people go through from such prolong diseases like hepatitis C. they ignore other joys of life in this grief. It may be a big shock in itself to be associated with such illness. Psychological well-being also explains the unremitting emotional and cognitive evaluation

of personal traits that helps to experience life gratification, satisfying emotions, and low levels of negative feelings (Yazdani, et al., 2018).

Previous studies claimed reduction in anxiety and depression among patients because of emotional intelligence. Gillanders, Wild, and Gillanders, (2008) in their study on patients have found that less anxiety and a more acceptance of the disease is linked with the ability of regulating emotions, although difficulty in regulating emotions develops depression, distress, and dissatisfaction with the received social support. Social support is one of the most essential aspect of the life of individuals having HCV. Which gratifies person's physical, emotional, and cognitive needs (Huang, Chengalur-Smith, & Pinsonneault, 2019). Emotional social support is related with innermost feelings like understanding, attentiveness, and concern. Whereas informational support is assistance in form of knowledge, recommendations, views and advice which could help patients to understand and manage the disease consequences. (Liang, Ho, Li, & Turban, 2011). Following is the discussion of outcomes regarding each objective and hypothesis.

Fist hypothesis of the study stated the positive relationship of self-compassion, social support and psychological wellbeing among patients with hepatitis C. Outcomes (see table 8) of the study clearly support this hypothesis. Positive domains of self-compassion including self-kindness, common humanity and mindfulness positively correlated with psychological well-being. Sun, Chan, and Chan, (2016) also studied the relationship between self-compassion and psychological well-being and explained their positive correlation. The outcomes of the study are consistent with Neff and Lamb's (2009) research that suggests treating oneself with warmth, care and kindness and seeing failures or suffering as shared human experience plays an imperative role in psychological health.



Social support from family and peers also support this hypothesis by positively correlating with psychological wellbeing. These findings are consistent with earlier researches. Numerous studies have delivered strong evidence of the connection between psychological well-being and social support. Support work as a buffer for the person suffering stressful life conditions as well as helps person in reducing the amount of experienced stress (Poudel, Gurung, & Khanal, 2020). Poudel, Gurung and Khanal, (2020) also discovered the strong relationship of well-being and social support system. According to them social support from confidants (i.e. family, friends), peers, and significant others serves as a shielding factor for individuals. While, in determination of quality of life in hepatitis C. patients, negative social relations plays an exclusive role. As they use to face stigmatization in their private and professional setting. Living with such stigmatizing diseases damages or sometimes complete collapses their support network (Blasiolo, Shinkunas, LaBrecque, Arnold, & Zickmund, 2006). However, social support from supervisors did not show any significant support to this hypothesis. Social support from experts or supervisors is not very important or considered in the areas from where our sample belongs because most people have their own work or business. They don't usually work under the supervision of others.

The next hypothesis of this study was related to the relationship of cognitive-emotional regulation with other study variables. It was assumed that the positive domains of cognitive emotional regulation; putting into perspective, positive reappraisal, positive refocusing, acceptance and planning have significant positive relationship with self-compassion, psychological wellbeing and social support. Results in table 8 strongly support this assumption. Several researchers studied this relation as well. Garnefski and Kraaij (2006) explained cognitive-emotional regulation as coping strategies which are used by the person after undergoing through an unpleasant event. They have great effects on person's psychological wellbeing.

Haga, Kraft and Corby (2009) inspected cognitive reappraisal. Outcomes disclosed that increased practice of cognitive reappraisal resulted in increased levels of optimistic well-being. Zhou, Wu, and Zhen (2017) also exposed the positive relationship between social support and cognitive-emotional regulation.

Next, it was also hypothesized that self-blame, other-blame, rumination and catastrophizing (which falls under the category of negative cognitive-emotional regulation) negatively correlates with self-compassion, psychological wellbeing and social support. Outcomes of the study supported this assumption as well. The outcomes of the American graduate study are consistent with present study. They exhibited the negative relation between psychological wellbeing and maladaptive cognitive-emotional strategies (McIlwraith & Yang, 2010).

Responses to pressure, for instance self-blame, catastrophizing and rumination, have been usually considered as difficulties in emotion, (Garnefski, Boon, & kraaij, 2003; Martin & Dahlin, 2005; Garnefski & Kraaij, 2006). Many studies also declare the emotion regulation complications as development and preservation of psychopathological indications (Aldao, Nolen-Hoeksema, & Schweizer, 2010; Sloan, Hall, Moulding, Bryce, Mildred, & Staiger, 2017). Martin and Dahlen (2005) explored that blaming others, catastrophizing and rumination were positively associated with emotional distress, which damage the person's psychological wellbeing. Moreover, the fallouts of the study of Garnefski, Boon and Kraaij (2003) disclosed that there is significant association between reduced wellbeing and cognitive strategies of rumination, self-blame, catastrophizing, positive reappraisal and putting into perspective.

By use of cognitive styles for example rumination, self-blame and catastrophizing individuals become more susceptible to emotional problems, though other cognitive styles, like

positive refocusing, acceptance, putting into perspective and positive reappraisal makes persons less susceptible (Garnefski et al., 2001; Garnefski et al., 2004; Kraaij, Garnefski, & Van, 2003).

According to Martin and Dahlen (2005) self-blame, catastrophizing, rumination and positive reappraisal are the important predictors of negative emotions. There is growing evidence that mental health complications (e.g., depression, anxiety), exhaustion, as well as poor well-being are linked with maladaptive (Garnefski et al. 2001; Künsting, Billich-Knapp, & Lipowsky, 2012; Hinterman, Burns, Hopwood, & Rogers, 2012; Repo, 2011).

Another assumption of the study was 'self-compassion increases psychological well-being among patients with hepatitis C. Figures in table 9 demonstrate that self-compassion (i.e. self-kindness, common humanity & mindfulness) enhances the psychological wellbeing of patients with hepatitis C. Having similarly conflicting (negative) domains like isolation and over identified reduces psychological wellbeing among patients. Many researches sported this assumption as well. Self-compassionate individuals reported more happiness, better life satisfaction, lower negative thoughts with fewer symptoms of psychological suffering (such as depression and anxiety) than individuals with less self-compassion (Macbeth & Gumley, 2012; Neff & Vonk, 2009). Neff and her fellows (2007) also reported some psychological wellbeing constructs including wisdom, personal initiative and optimism that are positively correlated with self-compassion (Neff et al. 2007).

Next hypothesis of current study stated that positive cognitive-emotional regulation strengthens the relationship between self-compassion and psychological wellbeing. Findings in table 11, 13, 15, 17, 19 and 21 exhibit that almost all the positive domains of cognitive-emotional regulation played dynamic role in strengthening the relationship between self-compassion and

psychological wellbeing among patients. Previous studies investigated this phenomenon as well and reported higher psychological wellbeing and fewer shock in results of practicing cognitive coping strategies (Feldner, Zvolensky, Stickle, Bonn-Miller & Leen-Feldner, 2006). John and Gross (2007) also supported this assumption by declaring the ability of regulating negative and positive emotions as symbol of psychological well-being. Several studies have explored that those patients who utilize coping skills such as reappraisal frequently in daily life report improved psychological well-being (Gross & John, 2003; Nezlek & Kuppens, 2008). Indeed, prior studies have specified that reappraisal ability serves as protection against depressive indicators at high stress levels (Troy, Wilhelm, Shallcross, & Mauss 2010). Panahia, Yunusb, and Panahic, (2016) found positive cognitive-emotional regulation components as a booster of psychological wellbeing.

Another hypothesis for the current study was that the relationship between self-compassion and psychological wellbeing is dwindled by the impact of negative domains of cognitive-emotional regulation. Figures in above mentioned tables supported this assumption as well. They are also inconsistent with past studies. Harrington and Loffredo (2010) revealed that wellbeing is negatively affected by rumination. Panahia, Yunusb, and Panahic (2016) also found negative cognitive-emotional regulation components as a buffer to psychological wellbeing. Previous studies have mostly inspected rumination as maladaptive strategy that decreases self-compassion skills and psychological wellbeing of patients (Burg & Michalak 2011; Williams 2008; Coffey & Hartman 2008)

We cannot say that last hypothesis of the study was fully supported by the findings. Hypothesis specified that social support strengthens the relationship between self-compassion and psychological wellbeing. Social support contributed in strengthening the connection between self-

kindness and common humanity with psychological wellbeing. However, it did not significantly affect mindfulness. On the other hand opposite domain of self-compassion (i.e. isolation) was also affected by social support. Social support did not play any significant role in influencing self-judgment and over-identified. Some researchers found positive support from friends and family as a booster of wellbeing such as satisfaction of life (Chen et al., 2017). Suldo and Schaffer (2008) examined mental wellness among youth. They found out that peer support decreases psychopathology indicators and increases psychological wellness. Social associations impact an individual's psychological wellbeing and even physical wellness (Uchino, Cacioppo, & Kiecolt-Glaser, 1996). In a research by Cai and his fellows (2017) support received from one's family, peers, friends, and others such as supervisors or help providers were positively interrelated with acceptance, putting into perspective, positive refocusing, positive reappraisal, planning and inversely associated with self-blame, other-blame, rumination and catastrophizing. Maor and Mitchem (2020) explored that hospitalized patients need more emotional and educational and social support for the decline of depression, anxiety, distress and isolation. Sense of perfectly setting in friendly family helps a person to understand the positive edges of unpleasant experiences and give him courage to turn them into strength and knowledge. This approach by past difficult circumstances gives energy to individuals to change the distasteful situation into organize activities (Sobol, Woźny, & Czubak-Paluch, 2021). In context of the conception projected by Baumeister and Leary (1995), received support from family gives young patients the strength to achieve positive reappraisal even from problematic and unfriendly life events. Family that offers support to its members is a model of managing emotions that young adults admire (Morris, Silk, Steinberg, Myers, & Robinson, 2007).

To study the influence of gender on study variables, t- test was computed. Figures in table 22 show that there is little significant difference between male and females in common humanity (CM), social support from peers (SSB), positive refocusing (PRF) and planning. Males scored high on SSB and planning. Whereas females scored high on CM and PRF. Research targeted area (from where the data has been collected) males are expected to have more interaction with their peers and fellows as compared to females. Resultantly, they get more social support from them. Outcomes of current investigation are not consistent with prior discoveries of a meta-analysis on self-compassion. Stated that levels of self-compassion abilities are slightly lower in females than males (Yarnell, et al., 2015). Muris, Meesters, Pierik and de Kock, (2016) discovered no significant gender differences in self-compassion. Study of Ariyani and Hadiani (2019) illustrates that female are dominant in practicing self-kindness rather than common humanity and mindfulness. Female students seems to have more ability to comprehend and accept themselves. Although males are dominant in practicing common humanity instead of self-kindness and mindfulness. Male students tend to have more ability to perceive complications and problem as a part of human life, which everyone practices and they recognize that they are not the only one in this suffering.

Another t-test analysis was computed to see the differences between two family systems (joint and nuclear) on self-compassion, psychological wellbeing, cognitive emotional regulation and social support. Findings (see table 23) reveal that patients from joint family system tend to have more support than people from nuclear family system. They also scored high on acceptance and planning. Usually people in joint family system are more compassionate about others. They use to blame themselves instead of others for any negative event. However, people from nuclear family system are more kind and caring to themselves. Study by Murid (2003) sported these results as well. Findings stated that individuals in joint family gets high family support as related to the

patients who belongs to nuclear family. Nausheen and Kamal (2007) studied patients of cancer and discovered that people who live in a joint family gets great support from family than the people from nuclear family.

To study the effect of age on study variables, one-way ANOVA was carried out. Results in table 24 indicate that late adult group tend to have more negative self-compassion and cognitive-emotional regulation strategies like self-judgment, rumination and catastrophizing. Moreover, results of our research, indicate that middle age group to adults practice more positive strategies of self-compassion and cognitive emotional regulation as compare to late adults. Kindness towards oneself and received social support is higher in young adults. Just like in past studies, habit of cognitive-emotional regulation skills were found in young adults (Garnefski & Kraaij 2006). Previous studies indicated that poorer subjective wellbeing is associated with lower physical health in older adults (Allen, Goldwasser, & Leary 2012).

Another one-way ANOVA was carried out to discover the effect of marital status on self-compassion, psychological well-being, cognitive-emotional regulation and social support. Findings in table 26 describe that patients having other marital status (i.e. divorce, widow) scored more on rumination and catastrophizing as compared to unmarried and married people. Particular reason for the circumstances is trauma which put them in a condition where they think about loss all the time and sometimes perceive other events extra worse than actually they are. Married people scored high on common humanity and acceptance. Marriage is a relationship where both parties have to understand, accept and compromise on other person's characteristics. This relationship also helps to develop the realization that failure, suffering is the part of life and everyone goes through it. They are not the only one. Results also indicate that unmarried people have more compassion towards themselves. In today's world young people are full of self-love and dedicated

to their aims and dreams. Furthermore, some longitudinal researches propose that in young adults, self-compassion serves as protection on various negative psychological factors. For example, reduced depression in young students predicted higher levels of self-compassion (Raes, 2011).

### **Conclusion and implications**

To sum up everything that has been stated so far, present study determined that self-compassion is a strongest positive predictor of psychological well-being of hepatitis C. patients. Self-compassion strategies helps patients to perform better while fighting with their diseases. Domains of cognitive-emotional regulation serves as coping strategies which strengthens the relationship between self-compassion and psychological well-being. Social support plays very important role in life of hepatitis C. patients. It positively moderates the relationship between self-compassion and psychological well-being.

This study provides a comprehensive practical and theoretical contribution to the literature. The findings and translation of scales might be the great input in the area of health and positive psychology. It proposes other to uncover this area with further research. It might play the extended and enhanced role of doctors, physicians or other health practitioners in terms of understanding the individual and psychological factors of patients, while treating, managing and prevention of such elongate disease like hepatitis C. It can also be helpful for the patients and their families to understand the importance of support, care and kindness and guide them to practice above mentioned coping strategies so that they can manage their disease efficiently.

### **Limitations & suggestions**

Every study plays an important role in understanding and solving the problems. Nothing is flawless in this world and as for a scientific research at least it is not possible to be perfect.



Limitations of a study don't make any harm because limitations encourage the research for further investigation and work on other likely alternatives. In same way this research, despite the significant contributions, is not deprived of limitations. Following are the limitations of current study along with recommendations:

Present investigation only contained data of outdoor patients. If data had been obtained from indoor patients as well, the comparison of indoor and outdoor patients would have had a significant impact on this research. Due to COVID-19 indoor patients were not approachable. Moreover, comparable groups could have been formed if we had also taken information about the duration of the patients' illness.

This study carried out the cross-sectional correlational research design. Longitudinal research on this topic can better gather information on the psychological state of people who are battling with Hepatitis C.

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## **Appendixes**

## تعارف

میں عروج فاطمہ نمل یونیورسٹی کی طالبہ ہوں۔ ہمارہ ادارہ تدریس و تعلیم کے ساتھ ساتھ انسانی اور معاشرتی مسائل پر تحقیق کرتا ہے۔ موجودہ تحقیق اسی سلسلہ کی ایک کڑی ہے جس کے لئے ہمیں آپ کا تعاون درکار ہے۔ ہم ہیپاٹائٹس سی کے مریضوں کی زندگی کے نفسیاتی اور سماجی پہلوؤں پر تحقیق کر رہے ہیں۔

آپ کی خدمت میں کچھ سوال نامہ جات پیش کیے جا رہے ہیں، آپ سے درخواست ہے کہ سوال نامہ جات کے ساتھ دی گئی ہدایات کو غور سے پڑھیں اور ان کی روشنی میں جواب دیں۔ آپ کو یقین دلایا جاتا ہے کہ آپ سے لی گئی معلومات صیغہ راز میں رکھی جائیں گی اور ان کو صرف تحقیقی مقاصد کے لئے استعمال کیا جائے گا۔

براہ مہربانی کوئی بیان خالی نہ چھوڑیں اور وضاحت کریں کہ ان بیانات سے آپ کس حد تک متفق ہیں۔

شکریہ

عروج فاطمہ (ایم فل سکالر)

## کوائف

تاریخ \_\_\_\_\_

نام \_\_\_\_\_

جنس (مرد/عورت/دیگر) \_\_\_\_\_

عمر \_\_\_\_\_

تعلیم \_\_\_\_\_

شہر، گاؤں \_\_\_\_\_

پیشہ \_\_\_\_\_

مہانہ آمدن \_\_\_\_\_

فیملی سسٹم (جوائنٹ/نیوکلئر) \_\_\_\_\_

ازدواجی حیثیت (شادی شدہ/غیر شادی شدہ/دیگر) \_\_\_\_\_

بیماری کی مدت \_\_\_\_\_

بیماری کی سٹیج \_\_\_\_\_

شناختی کارڈ نمبر \_\_\_\_\_

موبائل نمبر \_\_\_\_\_

**Appendix B****Self-compassion Scale (original version)****HOW I TYPICALLY ACT TOWARDS MYSELF IN DIFFICULT TIMES**

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

**Almost  
never**

**1**

**2**

**3**

**4**

**Almost  
always**

**5**

- \_\_\_\_\_ 1. I'm disapproving and judgmental about my own flaws and inadequacies.
- \_\_\_\_\_ 2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.
- \_\_\_\_\_ 3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.
- \_\_\_\_\_ 4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.
- \_\_\_\_\_ 5. I try to be loving towards myself when I'm feeling emotional pain.
- \_\_\_\_\_ 6. When I fail at something important to me I become consumed by feelings of inadequacy.
- \_\_\_\_\_ 7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.
- \_\_\_\_\_ 8. When times are really difficult, I tend to be tough on myself.
- \_\_\_\_\_ 9. When something upsets me I try to keep my emotions in balance.
- \_\_\_\_\_ 10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.
- \_\_\_\_\_ 11. I'm intolerant and impatient towards those aspects of my personality I don't like.



- \_\_\_\_\_ 12. When I'm going through a very hard time, I give myself the caring and tenderness I need.
- \_\_\_\_\_ 13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.
- \_\_\_\_\_ 14. When something painful happens I try to take a balanced view of the situation.
- \_\_\_\_\_ 15. I try to see my failings as part of the human condition.
- \_\_\_\_\_ 16. When I see aspects of myself that I don't like, I get down on myself.
- \_\_\_\_\_ 17. When I fail at something important to me I try to keep things in perspective.
- \_\_\_\_\_ 18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.
- \_\_\_\_\_ 19. I'm kind to myself when I'm experiencing suffering.
- \_\_\_\_\_ 20. When something upsets me I get carried away with my feelings.
- \_\_\_\_\_ 21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.
- \_\_\_\_\_ 22. When I'm feeling down I try to approach my feelings with curiosity and openness.
- \_\_\_\_\_ 23. I'm tolerant of my own flaws and inadequacies.
- \_\_\_\_\_ 24. When something painful happens I tend to blow the incident out of proportion.
- \_\_\_\_\_ 25. When I fail at something that's important to me, I tend to feel alone in my failure.
- \_\_\_\_\_ 26. I try to be understanding and patient towards those aspects of my personality I don't like.

## SELF COMPESSION SCALE

نمبر شمار	سوال	تقریباً ہمیشہ	اکثر	مسلل	کبھی کبھار	تقریباً کبھی نہیں
1	میں اپنی غلطیوں اور کوتاہیوں کے بارے میں جانبدار ہوں اور ان کو تسلیم نہیں کرتا / کرتی۔					
2	جب میں افسردہ محسوس کر رہی ہوں تو پر غلط چیز بار بار میرے ذہن میں آتی ہے اور میں اس میں پھنس جاتا / جاتی ہوں۔					
3	جب چیزیں میرے حق میں غلط میں ہو رہی ہوتی ہیں تو میں ان مشکلات کو زندگی کے ایک حصہ کے طور پر دیکھتا / دیکھتی ہوں جس سے ہر کوئی گزرتا ہوں۔					
4	جب میں اپنی کوتاہیوں کے بارے میں سوچتا / سوچتی ہوں تو اس سے مجھے تنہائی کا احساس ہوتا ہے اور میں باقی دنیا سے کٹ جاتا / جاتی ہوں۔					
5	جب میں جذباتی درد محسوس کرتا / کرتی ہوں تو اپنے ساتھ پیار سے پیش آنے کی کوشش کرتا / کرتی ہوں۔					
6	جب میں کسی ایسی چیز یا بات میں ناکام ہوتا / ہوتی ہوں جو کہ میرے لیے بہت اہم ہو، تو میں اپنی مکمل توانائی اپنے آپ کو کمتر محسوس کرنے میں صرف کر دیتا / دیتی ہوں۔					
7	جب میں بے بس ہوتا / ہوتی ہوں تو میں خود کو یاد کرواتا / کرواتی ہوں کہ دنیا میں ایسے بہت سے لوگ ہیں جو میرے طرح محسوس کرتے ہیں۔					

نمبر شمار	سوال	تقریباً ہمیشہ	اکثر	مسل	کبھی کبھار	تقریباً کبھی نہیں
8	جب وقت بہت مشکل ہوتا ہے تو میں خود پر بہت سختی (جر) کرتا / کرتی ہوں۔					
9	جب کوئی چیز مجھے پریشان کرتی ہے تو میں اپنے جذبات کو متوازن رکھنے کی کوشش کرتا / کرتی ہوں۔					
10	جب میں کسی حوالے سے کمتر محسوس کرتا / کرتی ہوں تو میں خود کو یاد کرواتا / کرواتی ہوں کہ اس طرح کی کمی اور بھی کافی لوگوں میں پائی جاتی ہے۔					
11	مجھے اپنی شخصیت کے وہ پہلو بالکل بھی برشت نہیں ہوتے جن کو میں ناپسند کرتا / کرتی ہوں۔					
12	جب میں مشکل وقت سے گزر رہا ہوتا / رہی ہوتی ہوں تو اپنے آپ کو وہ توجہ اور پیار دیتا / دیتی ہوں جس کی مجھے ضرورت ہو۔					
13	جب میں افسردہ محسوس کرتا / کرتی ہوں تو مجھے لگتا ہے کہ دوسرے لوگ شاید مجھ سے زیادہ خوش ہیں۔					
14	جب کوئی تکلیف دہ واقعہ ہوتا ہے تو میں صورت حال کا متوازن (غیر جانبدار) انداز میں جائزہ لینے کی کوشش کرتا ہوں۔					
15	میں اپنی ناکامیوں کو انسانی زندگی کے حصہ کے طور پر سمجھنے کی کوشش کرتا / کرتی ہوں۔					
16	جب میں اپنے ایسے پہلوؤں کو دیکھتا / دیکھتی ہوں جو کہ مجھے پسند نہیں ہیں تو میں کمتر محسوس کرتا / کرتی ہوں۔					

نمبر شمار	سوال	تقریباً ہمیشہ	اکثر	مسلل	کبھی کبھار	تقریباً کبھی نہیں
17	جب میں کسی اہم چیز میں ناکام ہو جاتا / جاتی ہوں تو چیزوں کو حالات کے تناظر میں سمجھنے کی کوشش کرتا / کرتی ہوں۔					
18	جب میں جدوجہد کر رہا ہوتا / رہی ہوتی ہوں تو مجھے لگتا ہے کہ باقی لوگوں کا ایسا وقت یقیناً آسان چل رہا ہے۔					
19	جب میں مشکلات سے گزر رہا ہوتا / رہی ہوتی ہوں تو میں اپنے ساتھ مہربان ہوتا / ہوتی ہوں۔					
20	جب مجھے کوئی چیز بہت پریشان کرتی ہے تو میں جذبات کی رو میں بہہ جاتا / جاتی ہوں۔					
21	جب میں مشکلات سے گزرتا / گزرتی ہوں تو اپنے ساتھ تھوڑا بے رحم ہو جاتا / جاتی ہوں۔					
22	جب میں افسردہ ہوتا / ہوتی ہوں تو تجسس اور کھلے دل سے اپنے جذبات کی طرف رجوع کرنے کی کوشش کرتا / کرتی ہوں۔					
23	میں اپنی غلطیوں اور کوتاہیوں کو (کھلے دل سے) بردشت کرتا / کرتی ہوں۔					
24	جب کچھ تکلیف دہ ہوتا ہے تو میں اسے ضرورت سے بڑھ کر محسوس کرتا / کرتی ہوں۔					
25	جب میں اپنے کسی اہم کام میں ناکام ہوتا / ہوتی ہوں تو خود کو ان ناکامیوں میں تنہا محسوس کرتا / کرتی ہوں۔					
26	میں اپنی شخصیت کے ان پہلوؤں کو سمجھنے اور برداشت کرنے کی کوشش کرتا / کرتی ہوں جو مجھے پسند نہیں۔					

## Appendix D

## Self-compassion scale (back translation)

No.	Items	Almost never	Sometimes	Regularly	Often	Almost always
1	I am biased about my mistakes and insufficiencies and I don't accept them.					
2	When I feel sad then wrong things come to mind again and again and I stuck between them.					
3	When things are not working in my favor then I see these difficulties as part of life which everyone has to face					
4	When I think about my insufficiencies they make me feel lonely and I cut off from rest of the world.					
5	When I feel emotional pain I try to treat myself with love.					
6	When I fail in anything which was important for me, then I waste all of my energy to feel inferior.					
7	When I feel helpless I remind myself that there are many people on earth who feel like me.					
8	I treat myself strictly when time is very hard.					

<b>9</b>	When anything makes me anxious then I try to balance my emotions.					
<b>10</b>	When I feel inferior due to any reason I remind myself that many people have same incapability.					
<b>11</b>	I do not tolerate side of my personality which I dislike.					
<b>12</b>	When I am passing through hard time then I give myself attention and love which I need.					
<b>13</b>	When I feel sad I feel other people are happier than me.					
<b>14</b>	When any painful accident happens I try to observe situation with unbiased approach.					
<b>15</b>	I try to consider my failures as part of human life.					
<b>16</b>	When I see my sides which I don't like I feel inferior.					
<b>17</b>	I try to keep things in perspective when I fail at something which is very important to me.					
<b>18</b>	When I am struggling I feel such time is easy for other people.					
<b>19</b>	When I pass through difficult time I show kindness to myself.					
<b>20</b>	When anything makes me anxious I flow with emotions.					
<b>21</b>	When I pass through difficult time I treat myself with bit unkindness.					

22	When I feel sad I try to respond my emotions with open heart and curiosity					
23	I bear my mistakes and insufficiencies.					
24	I feel more than needed when painful thing happens.					
25	I feel lonely in my failures when I fail in anything important.					
26	I try to understand and bear the sides of my personality which I don't like.					

## Appendix E



**Psychiatric Research Unit**  
WHO Collaborating Centre in Mental Health

### WHO (Five) Well-Being Index (1998 version)

Please indicate for each of the five statements which is closest to how you have been feeling over the last two weeks. Notice that higher numbers mean better well-being.

Example: If you have felt cheerful and in good spirits more than half of the time during the last two weeks, put a tick in the box with the number 3 in the upper right corner.

	<i>Over the last two weeks</i>	All of the time	Most of the time	More than half of the time	Less than half of the time	Some of the time	At no time
<b>1</b>	<b>I have felt cheerful and in good spirits</b>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
<b>2</b>	<b>I have felt calm and relaxed</b>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
<b>3</b>	<b>I have felt active and vigorous</b>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
<b>4</b>	<b>I woke up feeling fresh and rested</b>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0
<b>5</b>	<b>My daily life has been filled with things that interest me</b>	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0



## Appendix F

نفسیاتی تحقیق کا ادارہ

WHO کا ذہنی صحت میں اشتراکی تعاون کا مرکز۔

WHO (پانچ) کا بہبود کا انہرسٹ (۱۹۹۸) کا تفسیر

مہربانی کر کے ان پانچ میں سے ہر بیان کے لئے نشان دہی کریں جو اس بات سے قریب ترین ہو کہ گزشتہ دو ہفتوں میں آپ کی محسوس کرتے رہے ہیں۔ دیکھیں زیادہ نمبرات کا مطلب ہے بہتر بہبود۔

مثال کے طور پر اگر آپ نے پچھلے دو ہفتوں میں آدھے سے زیادہ وقت خوشی اور زندہ دلی محسوس کی ہے تو اوپر دائیں کونے میں تیس (۳) نمبر کے ساتھ خانے میں (✓) کا نشان لگائیں۔

نمبر شمار	پچھلے دو ہفتوں میں	ہر وقت	زیادہ تر وقت	آدھے سے زیادہ وقت میں	آدھے سے کم وقت میں	کچھ وقت	کسی وقت بھی نہیں
۱۔	میں نے خوشی اور زندہ دلی محسوس کی۔	۵	۴	۳	۲	۱	۰
۲۔	میں نے پرسکون اور آرام محسوس کیا۔	۵	۴	۳	۲	۱	۰
۳۔	میں نے چستی اور طاقت محسوس کی۔	۵	۴	۳	۲	۱	۰
۴۔	میں نے اٹھتے ہوئے تازگی اور آرام محسوس کیا۔	۵	۴	۳	۲	۱	۰
۵۔	میری روزمرہ کی زندگی ان چیزوں سے بھری پڑی ہے جن میں مجھے دلچسپی ہے۔	۵	۴	۳	۲	۱	۰

## Appendix G

## CERQ

**How do you cope with events?**

Everyone gets confronted with negative or unpleasant events now and then and everyone responds to them in his or her own way. By the following questions you are asked to indicate what you generally think, when you experience negative or unpleasant events.

Questions	(almost) never	some-times	regularly	often	(almost) always
1. I think that I have to accept that this has happened	1	2	3	4	5
2. I often think about how I feel about what I have experienced	1	2	3	4	5
3. I think I can learn something from the situation	1	2	3	4	5
4. I feel that I am the one who is responsible for what has happened	1	2	3	4	5
5. I think that I have to accept the situation	1	2	3	4	5
6. I am preoccupied with what I think and feel about what I have experienced	1	2	3	4	5
7. I think of pleasant things that have nothing to do with it	1	2	3	4	5
8. I think that I can become a stronger person as a result of what has happened	1	2	3	4	5
9. I keep thinking about how terrible it is what I have experienced	1	2	3	4	5
10. I feel that others are responsible for what has happened	1	2	3	4	5

11. I think of something nice instead of what has happened	1	2	3	4	5
12. I think about how to change the situation	1	2	3	4	5
13. I think that it hasn't been too bad compared to other things	1	2	3	4	5
14. I think that basically the cause must lie within myself	1	2	3	4	5
15. I think about a plan of what I can do best	1	2	3	4	5
16. I tell myself that there are worse things in life	1	2	3	4	5
17. I continually think how horrible the situation has been	1	2	3	4	5
18. I feel that basically the cause lies with others	1	2	3	4	5

## CERQ

ہدایات: ہر کوئی کبھی کبھار منفی یا ناخوشگوار واقعات کا سامنا کرتا ہے اور ہر کوئی ان واقعات کا اپنے انداز میں مقابلہ کرتا ہے۔ درج ذیل سوالات میں نشاندہی کرنے کا پوچھا گیا ہے کہ عام طور پر آپ کیا سوچتے ہیں جب آپ کے ساتھ منفی یا ناخوشگوار واقعات ہوتے ہیں۔

نمبر شمار	سوال	تقریباً ہمیشہ	اکثر	مسلل	کبھی کبھار	تقریباً کبھی نہیں
1	میں سوچتا / سوچتی ہوں کہ مجھے اب قبول کرنا پڑے گا کہ ایسا ہو چکا ہے۔					
2	میں اکثر اس کے بارے میں سوچتا / سوچتی ہوں کہ میں نے کیا محسوس کیا جو کچھ میرے ساتھ ہوا۔					
3	میں سوچتا / سوچتی ہوں کہ میں اس واقعہ سے کچھ سیکھ سکتا / سکتی ہوں۔					
4	مجھے محسوس ہوتا ہے جو کچھ ہوا اس کا / کی ذمہ دار میں ہی ہوں۔					
5	میں سوچتا / سوچتی ہوں کہ اب مجھے حالات کو قبول کر لینا چاہیے۔					
6	جو کچھ میرے ساتھ ہوا میں اس سے متعلق احساسات میں گھرا رہتا / گھری رہتی ہوں۔					
7	میں خوشگوار چیزوں کے متعلق سوچتا / سوچتی ہوں جس کا اس سے کوئی تعلق نہیں۔					

نمبر شمار	سوال	تقریباً ہمیشہ	اکثر	مسل	کبھی کبھار	تقریباً کبھی نہیں
8	میں سوچتا / سوچتی ہوں کہ جو کچھ ہو اس کے نتیجے میں، میں ایک مضبوط انسان بن سکتا / سکتی ہوں۔					
9	میں یہی سوچتا رہتا / سوچتی رہتی ہوں کہ میرے ساتھ جو کچھ ہو اوہ کتنا بھیانک ہے۔					
10	میں محسوس کرتا کرتی ہوں کہ جو کچھ بھی ہو اس کے ذمہ دار دوسرے لوگ ہیں۔					
11	میرے ساتھ جو ہو اس کے بجائے میں کسی اچھی جگہ کے بارے میں سوچتا / سوچتی ہوں۔					
12	میں حالات کو تبدیل کرنے کے متعلق سوچتا / سوچتی ہوں۔					
13	میں سوچتا / سوچتی ہوں کہ دوسری چیزوں کے مقابلے میں یہ اتنا برا نہیں تھا۔					
14	میں سوچتا / سوچتی ہوں کہ بنیادی وجہ میرے اندر ہی ہے۔					
15	میں منصوبہ بندی کے بارے میں سوچتا / سوچتی ہوں کہ میں کیا بہترین کر سکتا / سکتی ہوں۔					
16	میں اپنے آپ سے کہتا / کہتی ہوں کہ زندگی میں اس سے بری چیزیں ہیں۔					
17	میں مسلسل یہ سوچتا / سوچتی رہتی ہوں کہ کتنا بھیانک یہ واقعہ تھا۔					
18	میں محسوس کرتا / کرتی ہوں کہ بنیادی طور پر اس کی وجہ دوسرے لوگ ہیں۔					

## Appendix I

## MDSS (original version)

Below are some questions about the kind of help and support you have available to you in coping with your life at present. The questions refer to three different groups of people who might have been providing support to you **IN THE LAST MONTH**. For each item, please circle the alternative which shows your answer.

A. Firstly, think of your family and close friends, especially the 2 -3 who are most important to you.

Items	More often	Less often	It was just right
1. How often did they really listen to you when you talked about your concerns or problems?			
2. How often did you feel that they were really trying to understand your problems?			
3. How often did they really make you feel loved?			
4. How often did they help you in practical ways, like doing things for you or lending you money?			
5. How often did they answer your questions or give you advice about how to solve your problems?			
6. How often could you use them as examples of how to deal with your problems?			

B. Now, think of other people of about your age that you know, who are like you in being employed, unemployed, or studying.

Items	More often	Less often	It was just right
1. How often did they really listen to you when you talked about your concerns or problems?			

2. How often did you feel that they were really trying to understand your problems?			
3. How often did they help you in practical ways, like doing things for you or lending you money?			
4. How often did they answer your questions or give you advice about how to solve your problems?			
5. How often could you use them as examples of how to deal with your problems?			

C. Lastly, think of the people in some sort of authority over you. If you are *employed*, this means your supervisors at work. If you are *unemployed*, it means your local Commonwealth Employment Service staff. If you are a *full-time student*, it means your lecturers and tutors. Depending on which ones are relevant for you, answer for the 2-3 that you see most.

<b>Items</b>	<b>More often</b>	<b>Less often</b>	<b>It was just right</b>
1. How often did they really listen to you when you talked about your concerns or problems?			
2. How often did you feel that they were really trying to understand your problems?			
3. How often did they fulfil their responsibilities towards you in helpful practical ways?			
4. How often did they answer your questions or give you advice about how to solve your problems?			
5. How often could you use them as examples of how to deal with your problems?			

## سوشل سپورٹ سکیل

ہدایات: آپ کی حالیہ زندگی میں جس قسم کی مدد یا سہارہ آپ کے پاس موجود ہے، اس سے متعلق ذیل میں چند سوالات دیئے گئے ہیں۔ یہ سوالات تین طرح کے لوگوں سے متعلق ہیں جو ہو سکتا ہے آپ کو پچھلے مہینے میں سہارہ دے چکے ہوں۔ ہر سوال کے لیے اپنے منتخب کردہ جواب کے گرد دائرہ لگائیں۔

الف - سب سے پہلے اپنے خاندان یا قریبی دوستوں میں سے دو یا تین مخصوص لوگوں کے بارے میں سوچیں جو آپ کے لیے بہت اہم ہیں۔

نمبر شمار	سوال	مکمل طور پر	اکثر اوقات	ناکافی
1	جب آپ اپنے مسائل یا معاملات کے بارے میں بات کرتے ہیں تو وہ کس حد تک آپ کو سنجیدگی سے سنتے ہیں؟			
2	آپ کو کس حد تک محسوس ہوتا ہے کہ وہ آپ کو واقعی سمجھنے کی کوشش کرتے ہیں؟			
3	وہ آپ کو کس حد تک محسوس کرواتے ہیں کہ وہ آپ سے محبت کرتے ہیں؟			
4	عملی طور پر انہوں نے کتنی دفعہ آپ کی مدد کی، مثلاً پیسے ادھار دینا یا کچھ اور؟			
5	آپ کے مسائل کو حل کرنے کے لئے وہ آپ کے سوالات کا کس حد تک جواب دیتے ہیں یا کس حد تک آپ کو نصیحت کرتے ہیں؟			
6	اپنے مسائل کو حل کرنے کے لیے آپ ان کو کس حد تک مثال / رول ماڈل کے طور پر دیکھتے ہیں؟			



ب۔ اب اپنی عمر کے دوسرے لوگوں کو سوچیں جن کو آپ جانتے ہیں اور جو آپ جیسے (روزگار، بے روزگاری یا تعلیمی طور پر) ہوں۔

نمبر شمار	سوال	مکمل طور پر	اکثر اوقات	ناکافی
1	جب آپ اپنے مسائل یا معاملات کے بارے میں بات کرتے ہیں تو وہ کس حد تک آپ کو سنجیدگی سے سنتے ہیں؟			
2	آپ کو کس حد تک محسوس ہوتا ہے کہ وہ آپ کو واقعی سمجھنے کی کوشش کرتے ہیں؟			
3	عملی طور پر انہوں نے کتنی دفعہ آپکی مدد کی، مثلاً پیسے ادھار دینا یا کچھ اور؟			
4	آپ کے مسائل کو حل کرنے کے لئے وہ آپ کے سوالات کا کس حد تک جواب دیتے ہیں یا کس حد تک آپ کو نصیحت کرتے ہیں؟			
5	اپنے مسائل کو حل کرنے کے لیے آپ ان کو کس حد تک مثال / رول ماڈل کے طور پر دیکھتے ہیں؟			

ج۔ آخر میں ان دو سے تین لوگوں کے بارے میں سوچیں جو آپ پر کسی طرح کا اقتدار یا اتھارٹی رکھتے ہیں، مثلاً آپ کے باس یا استاد وغیرہ۔

نمبر شمار	سوال	مکمل طور پر	اکثر اوقات	ناکافی
1	جب آپ اپنے مسائل یا معاملات کے بارے میں بات کرتے ہیں تو وہ کس حد تک آپ کو سنجیدگی سے سنتے ہیں؟			
2	آپ کو کس حد تک محسوس ہوتا ہے کہ وہ آپ کو واقعی سمجھنے کی کوشش کرتے ہیں؟			
3	عملی طور پر انہوں نے کتنی دفعہ آپکی مدد کی، مثلاً پیسے ادھار دینا یا کچھ اور؟			
4	آپ کے مسائل کو حل کرنے کے لئے وہ آپ کے سوالات کا کس حد تک جواب دیتے ہیں یا کس حد تک آپ کو نصیحت کرتے ہیں؟			
5	اپنے مسائل کو حل کرنے کے لیے آپ ان کو کس حد تک مثال / رول ماڈل کے طور پر دیکھتے ہیں؟			

## Appendix K

## MDSS (back translation)

Below are some questions about the kind of help and support you have available to you in coping with your life at present. The questions refer to three different groups of people who might have been providing support to you IN THE LAST MONTH. For each item, please circle the alternative which shows your answer.

A. Firstly, think of your family and close friends, especially the 2 -3 who are most important to you.

Items	More often	Less often	It was just right
1. To what extent they seriously listen to you When you talk about your matters and problems?			
2. How often did you feel that they really try to understand you?			
3. To what extent they make you feel that they love you?			
4. Practically how many times they helped you like lending money or anything?			
5. To what extent they answer your question to solve your problems or advise you?			
6. To what extent you see them as your role model /example to solve your problems?			

B. Now, think of other people/peers, who are like you in being employed, unemployed, or studying.

Items	More often	Less often	It was just right
1. To what extent they seriously listen to you When you talk about your matters and problems?			

2. How often you feel that they really try to understand you?			
3. Practically how many times they helped you like for example lending money or anything?			
4. To what extent they answer your question to solve your problems or advise you?			
5. To what extent you see them as your role model /example to solve your problems?			

C. Lastly, think of the people in some sort of authority over you. If you are *employed*, this means your supervisors at work. If you are *unemployed*, it means your local Commonwealth Employment Service staff. If you are a *full-time student*, it means your lecturers and tutors. Depending on which ones are relevant for you, answer for the 2-3 that you see most.

<b>Items</b>	<b>More often</b>	<b>Less often</b>	<b>It was just right</b>
1. To what extent they seriously listen to you When you talk about your matters and problems?			
2. How often you feel that they really try to understand you?			
3. Practically how many times they helped you like for example lending money or anything?			
4. To what extent they answer your question to solve your problems or advise you?			
5. To what extent you see them as your role model /example to solve your problems?			