

Research Thesis

**RELATIONSHIP BETWEEN ALTRUISM, COMPASSION FATIGUE
AND PSYCHOLOGICAL WELLBEING AMONG
PSYCHOLOGISTS: MODERATING ROLE OF RESILIENCE**



Researcher

AFFAN DAWOOD AHMED

Reg No: 513-FSS/MSCP/F23

Supervisor

Dr MAZHAR IQBAL BHATTI

Department of Psychology

Faculty of Social Sciences

International Islamic University, Islamabad

2025

**RELATIONSHIP BETWEEN ALTRUISM, COMPASSION FATIGUE
AND PSYCHOLOGICAL WELLBEING AMONG
PSYCHOLOGISTS: MODERATING ROLE OF RESILIENCE**

Submitted to the Department of Psychology (Male Campus), International
Islamic University Islamabad in the partial fulfillment of the requirements

for the award of degree of

MS

IN

CLINICAL PSYCHOLOGY

By

AFFAN DAWOOD AHMED

513-FSS/MSCP/F23

Department of Psychology

Faculty of Social Sciences

International Islamic University, Islamabad

2025

**“RELATIONSHIP BETWEEN ALTRUISM, COMPASSION FATIGUE
AND PSYCHOLOGICAL WELLBEING AMONG PSYCHOLOGISTS:
MODERATING ROLE OF RESILIENCE”**

By

Affan Dawood Ahmed

Registration No. 513-FSS/MSCP/F23

Thesis Approved

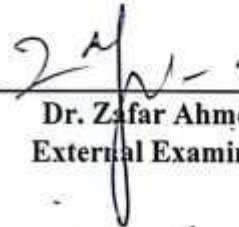
By



Dr. Mazhar Iqbal Bhatti
Supervisor



Dr. Sabir Zaman
Internal Examiner



Dr. Zafar Ahmed
External Examiner



Assistant to Dean
Department of Psychology



Dean Faculty of Social Sciences

**INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD
(PAKISTAN)**

DECLARATION

I, Mr. Affan Dawood Ahmed, Registration No. 513-FSS/MSCP/F23 student of MS in Clinical Psychology, session 2023-2025, hereby declare that the matter printed in the thesis titled: ‘RELATIONSHIP BETWEEN ALTRUISM, COMPASSION FATIGUE AND PSYCHOLOGICAL WELLBEING AMONG PSYCHOLOGISTS: MODERATING ROLE OF RESILIENCE’ is my own work and has not been printed, published and submitted as research work, thesis or publication in any form in any University, Research Institution etc in Pakistan or abroad.

Signatures of Deponent

Dated:

RESEARCH COMPLETION CERTIFICATE

Certified that the research work contained in this thesis titled: 'RELATIONSHIP BETWEEN ALTRUISM, COMPASSION FATIGUE AND PSYCHOLOGICAL WELLBEING AMONG PSYCHOLOGISTS: MODERATING ROLE OF RESILIENCE' has been carried out and completed by Mr. Affan Dawood Ahmed, Registration No: 513-FSS/MSCP/F23 under my supervision.

Date

Supervisor

Dr. Mazhar Iqbal Bhatti

Chairman

Department of Psychology

International Islamic University, Islamabad

DEDICATION

All praise and gratitude are due to Almighty Allah (SWT), the Most Beneficent and Merciful, whose divine will and blessings enabled me to reach this significant milestone in my academic journey. It is through His guidance, the heartfelt prayers of my parents, and the unwavering support and dedication of my teachers that I have been able to successfully complete my MS thesis. I would like to dedicate this work to my mother, who carried our dreams through every struggle, and to my father, whose belief in me remained steadfast, even in moments when my own faith wavered. I am deeply thankful to my supervisor, Chairman Department of Psychology, Dr. Mazhar Iqbal Bhatti, for his invaluable guidance, insightful feedback, and continuous encouragement throughout the course of this research. His mentorship has been a cornerstone in the completion of this thesis. My sincere appreciation also extends to my peer group for their encouragement, cooperation, and warm wishes, which have kept me motivated. I am especially grateful to my family for their endless support, love, and motivation that carried me through challenging times.

Table of Contents

	Page No
List of Tables	i
List of Annexures	li
Acknowledgement	lii
Abstract	lv
Chapter 1	
Introduction	1
Altruism	3
Compassion Fatigue	7
Psychological Wellbeing	13
Resilience	18
Literature Review	23
Rationale of the Study	30
Problem Statement	31
Significance of the Study	31
Objectives	32
Hypothesis	33
Conceptual Framework	34
Chapter 2	
Method	35
Research Design	35
Population	35
Sampling	35
Inclusion Criteria	36

	Exclusion Criteria	36
	Operational Definition	37
	Instruments	38
	Generative Altruism Scale	38
	Compassion Fatigue Inventory	39
	Short Warwick-Edinburg Mental Wellbeing Scale	40
	Brief Resilience Scale	41
	Demographic Sheet	42
	Procedure	42
	Data Analysis	43
	Ethical Considerations	43
Chapter 3	Results	45
Chapter 4	Discussion	57
	Limitations and Suggestions	60
	Implications	62
	Conclusion	63
	References	64
	Appendices	78

List of Tables

Table No.	Table Heading	Page No.
Table 1	Sociodemographic Characteristics of Participants	45
Table 2	Psychometric Properties of Study Major Variables	48
Table 3	Correlation of Altruism with Compassion Fatigue, Psychological Wellbeing and Resilience	50
Table 4	Gender Differences on mean scores of Compassion fatigue and Psychological wellbeing	51
Table 5	Multivariate multiple regression analysis predicting Compassion fatigue and Psychological wellbeing from Altruism	52
Table 6	Moderating effect of resilience on altruism and compassion fatigue	54
Table 7	Moderating effect of resilience on altruism and psychological wellbeing	56

List of Annexures

		Page No.
Annexure – A	Informed Consent	78
Annexure – B	Demographic Sheet	79
Annexure – C	Generative Altruism Scale	80
Annexure – D	Compassion Fatigue Inventory	82
Annexure – E	Short Warwick-Edinburgh Mental Wellbeing Scale	84
Annexure – F	Brief Resilience Scale	85

ACKNOWLEDGEMENT

I solemnly declare that the current research entitled: ‘RELATIONSHIP BETWEEN ALTRUISM, COMPASSION FATIGUE AND PSYCHOLOGICAL WELLBEING AMONG PSYCHOLOGISTS: MODERATING ROLE OF RESILIENCE’ is my personal work. It is not plagiarized nor copied from any other sources, and that I have followed all the research and ethical protocols. I am submitting this research to Department of Psychology, Faculty of Social Sciences, International Islamic University Islamabad as a partial fulfillment for the award of the degree of MS in Clinical Psychology. I also declare that I will not use this research for my degree program in future.

Abstract

Altruism, the act of selflessly doing good for others, is widely encouraged, praised and appreciated by each aspect or sector of society, from religion to institutions. However its impact on individuals, particularly in relation to compassion fatigue which can be termed as overburdening oneself from caring of others or by the desire to help others remains underexplored. The effects of altruism on psychological well-being, which is expressed as an overall satisfaction with your emotional aspects, personal growth and development, are also seldom discussed. This study was designed to explore the association between altruism, compassion fatigue and psychological wellbeing along with the moderating role of resilience which is the individual's capacity to fight back, face hardships and find ways to adopt to the new events and conditions. A purposive sampling technique was utilized to select a sample of 80 participants equally divided into male and female for this study working as psychologists in different public or private clinical settings. The participants were administered measures assessing altruism, compassion fatigue, psychological wellbeing and resilience. Generative Altruism Scale, Compassion Fatigue Inventory, Short Warwick-Edinburgh Mental Wellbeing Scale and Brief Resilience Scale were used for this purpose. The results suggest that altruism have a positive association with compassion fatigue ($r = .34, p < .01$), psychological wellbeing ($r = .26, p < .05$) as well as resilience ($r = .40, p < .01$). The results further indicate the role of altruism as a predictor of both compassion fatigue ($\beta = 1.11, p < .01$), explaining a variance of 12% ($R^2 = .12$) and psychological wellbeing ($\beta = .31, p < .05$), accounting a variance of 7% ($R^2 = .07$). Moderating role of resilience is also established for the relationship of altruism and compassion fatigue ($\beta = -.18, p < .02$) after the analysis of the results. The

outcome indicates the need to create awareness about the sustained presence of altruism and its negative impacts on an individual in the form of increased compassion fatigue. The study also sheds light on the use of resilience as a protective factor when faced with adversity.

Keywords: Altruism, Compassion fatigue, Psychological wellbeing, Resilience

INTRODUCTION

Altruism always has its place in history and the acts for the greater good of humanity which is recorded in our time has an element of altruism in it. Every existing religion in this world promotes and encourages altruistic approach in dealing with humanity. Every institution, multi-national companies and organizations also seek individuals possessing these aspects for the greater good of the working process. The idea behind it is to be selfless in dealing with others, a trait which is found to be very rare in the modern world where everyone is working and worried about their own interests. The term altruism was first introduced in 19th century by August Comte which was part of his larger views on positivism and ethics. In the area psychology it is specially associated with individuals working in the field. To spend your time in listening, understanding, accepting every aspect of your client requires patience, compassion and altruistic approach.

Like almost other aspects in life, excess of anything could be leading towards harmful outcome. Considering how much altruism is preached, very rarely the impacts of its excess practice is ever discussed. Altruism is stemmed from the concept of compassion. The difference stands as that compassion is a feeling towards others and altruism is a response to complement that feeling. Overexposure to compassion or the situations of compassion can lead towards compassion fatigue. We normally associate fatigue with physical aspects of an individual but the emotional aspects which is invisible to the world gets ignored. Compassion fatigue has its own severe negative drawbacks on

the individual which may include emotional numbness and emotionally withdrawn from others. Can altruism contribute to compassion fatigue? And how to address it if that's the case? One part of the research focuses on understanding that relationship.

An individual's wellbeing describes many aspects related an individual which may include an overall emotional health and how that impacts the functioning in normal life. Normally it relates to positive psychology and described as something central to individual's psychology. Here we try to identify how it gets affected by altruism in a longer run, positively or negatively and hence its translation in life.

In many aspects of life the difficulty an individual faces can have drastically negative impacts, sometimes they pay the ultimate price. It is the resilience which keeps a person going, the will to keep fighting in the face of adversity, the mental strength when everything seems disastrous. The study focuses on understanding the impact of resilience on the relationship of altruism, compassion fatigue and wellbeing. Whether its resilience that keeps a person going even when faced with compassion fatigue and low wellbeing overall. It provides an extensive insight of the foundational mechanisms that may contribute towards a certain behavior. Along with that, investigating the moderating role of resilience provides valuable insights into strategies that maybe helpful in increasing resilience in dealing with compassion fatigue and negative wellbeing. The research can also help us in identifying altruism as a possible predictor for future probability of compassion fatigue and negative wellbeing. This could open the doors for a new line of preventive therapies to proactively preparing a person for a better understanding and dealing with repercussions.

This study seeks to provide clear and precise awareness to the complex relationships between altruism, compassion fatigue, wellbeing and the role of resilience impacting the direction of it. The motivation or the reason behind this study is to identify the possible impacts of altruism, how something considered innately positive can have some drastic impacts on the individual`s psychology and life.

Altruism

With many different angles to view altruism, one of them can be called in as having a pro-social behavior or motivation (Gicheva, 2020). Many are of the view that motivation behind an individual`s altruistic acts is said to be welfare for others. Being totally selfless about themselves and spending time thinking and acting to prevent any harm to others and to be useful in all possible ways but caution must be of essence as this could lead to significant negative consequences (Okaley et al., 2012). In terms of behavioral approach, altruism was associated as high priced actions by individuals that can lead to fruitful outcomes for others (Fehr & Fischbacher, 2003).

Altruism is subjectively defined by different elements in different ways. It can be portioned by those who receive benefits and those who are suffering while giving those benefits. It can also be dependent on what kind of benefit is being given (Kerr et al, 2004). A leading research in Harvard university relates altruism to three different aspects which includes human personality, the society where it socializes or evolves and the many natures of each individual human being (Krebs, 1970).

Okaley et al. (2012) stated that the positive side of altruism once passionately followed can lead to a much darker gateway to abyss and can be a leading cause of

psychological distress even at a young age so it would be better to first understand the many different outlooks of altruism before acting for others because even the intent or act of doing good can be a pivotal reason behind something grave or worse either conscious or unconscious.

Khalil (2004) described altruism as a non-profitable act or simply an act of charity. One of the major traits an altruistic person must have is the anonymity. An altruistic act is always away from spotlight, an act without any intention of being the focused one. Altruism cannot and should not be ascertained in monetary terms, it is an act and an act could be of any nature and it should also not be brought into the circle purely on the debate of it being a legal obligation. The question regarding the basis of altruism or the clear motivation behind it can never be answered as every individual is different in its psychology or thinking. Scientists may try to find out an answer based on different perspectives as in biological, social, economic, cultural (Hoffman, 1981).

Shwartz (1977) identified many different routes to have aroused the feelings and acts of altruism. The need or presence of emotional or sentimental triggers which are mostly associated to social or self-desires or expectations to perform and work for others. Some may even relate it to genetic issues as well.

Okaley et al. (2012) further explained formation of altruism as a result of a chain reaction or linkages of different events. The conception of emphatic reaction leads to guilt which further forces a person towards self-judgment regarding the presence of injustice, inequality and unequal distribution of resources which could possibly lead to impulsive act of altruism which would only be hurtful for the altruist itself without any

positives to the person in need. Warneken and Tomasello (2009) in their study explored the presence of altruism in infants and lead to the it being a naturalistic, innate and intrinsic motivation to help others achieve their goals without any regard or need for a return. They linked the acts of infants with those of chimpanzees.

Piliavin and Charng (1990) stated that the older views of altruism being purely an egoistic motive are outdated. The new studies and research have led to the conclusion for it being a total selfless approach with a specific goal of helping others has a place and position in human psychology. When exploring altruism purely from an evolutionary angle, it comes down to it being a social construct and for that to happen it must be impacting both the receiver and giver. The person presenting or practicing an act must be in a state of loss in comparison to the one receiving resulting in the increase of benefits. In terms of biology, altruism goes against the fundamental evolutionary concepts of Darwin where survival of the fittest without any regard for others was the biggest concern for each person (West et al., 2006).

Biological pathway of altruism

The advancement in sciences have led us to view a single construct through many different lenses. With the latest inventions in technology crossing barriers in every possible way, it has help neuroscientists to view psychological concepts from pure biological point of views. When it comes to altruism the brain parts impacted by the decision making maybe associated with limbic regions as it is often called as the emotional center of the brain. It further includes nucleus accumbens as well as anterior

cingulate cortex which is considered as the region involved in motivational generator behind an action with feelings of rewards that comes along with it.

It further devolves into how a cost benefit analysis regarding any decision being taken by the individual. Further study has also pointed towards the role of cortical regions of brain including medial prefrontal cortex and an area called as temporoparietal junction. Former is involved in the process of decision making mediation along with instances where there is a need of long term memory retrieval where latter focuses more on making an individual understand their emotions in particular contexts thereby assisting them in every possible way (Filkowski et al., 2016).

The whole process involves a person coming in contact with the one they want to help out as the neural signals start playing with the individual itself before any action takes place. The mind acts as a snapshot taking camera and preserves an image of the person whom the individual intends to act. The image then blurs into or smudges into the individual look alike because that's the motivation behind the act in terms how would the individual feels if they were at the others place. This is followed up by emotions which lays the foundation for a possible or potential act. This then starts firing the neurons in prefrontal cortex which analyzes the decision in terms of it being positive and negative hence the altruistic brain comes into full motion (Pfaff, 2015)

The Empathy-Altruism Hypothesis

Baston (2017) brought forward one of the most influential views on altruism which is highly recognized today among social scientists. The worldly view of altruism through the lens of empathy. It is empathy which is the driving factor that determines the

altruistic actions or behavior. Empathy along with the absence of any self-interest whether it is in monetary sense or accompanied by the intention to lessen personal suffering or anguish. Baston truly identifies the human potential, when the motivation is just to play a positive role to help others whenever they feel empathy even if there is a way out to avoid any sort of distress.

Compassion Fatigue

We have always considered compassion, sympathy, empathy as part of a larger caring circle of any individual. The manifestations of these individual traits are different considering the kind of setting they are in. Those working in medical or healthcare settings are continuously exposed in a situation where they intrinsically show compassion towards patients, clients or victims. Its very important to take an extra care during these working because excess of exposure to compassion can lead to a condition of fatigue which is in specific terms is a stress related response or the byproduct of abundance of compassion. It may be further explained into a form of severe response which is normally physical and emotional in nature that erupts into a situation where an individual feels a lack of compassion towards others (Sinclair et al., 2017).

Sorenson et al. (2016) stated that there needs to be a presence of lot of interaction which is of emphatic nature between health care workers or givers and different patients or clients going through severe distress. The nature of these interactions demands compassion, sympathy, understanding. This can lead to an outcome where a caregiver becomes numb to all the possible feelings of compassion and it can be better described as a price which a caregiver has to pay which affects the patient effective treatment

In order to truly grasp a deeper comprehension of compassion fatigue, one must take notice of what compassion is. As argued by Ledoux (2015) that multiple possible physical manifestations can be observed, felt which are both physical and emotional nature. This may include frustration which could be implosive in nature at the beginning but can transform into explosive. That along with physical fatigue, being absent minded from reality, lack of attention on the tasks provided during job and a constant feeling of illness which is normally physical. Compassion fatigue can be better explained as the last stage or an amalgamation of being in a continuous state of stress that arises from the engagements with patients (Coetzee & Klopper, 2010).

One another possible direction which can explain compassion fatigue is the self-assessment by those caregivers who are constantly in the situation demanding their attention. If they feel distraught of not been able to fulfill the standards set for the necessary or acceptable care, then it can lead to a self-inflicted distress in them (Austin, 2009).

Potter et al. 2010 referenced the condition of an oncology department where he observed the constant patient care and how it gave rise to or generated severe work related stress. In simple terms the demands of the work were too much in comparison to the available resources and hence it raised a particular condition of fatigue which had many different observable marks. This in return drastically affected the worker productivity which resulted in negative self-judgment of being a failure as a caregiver and unable to fully perform their duties when in reality they are not but just the burden will give rise of negative notions.

Figley (2002) worked with different psychotherapists in his quest to understand compassion fatigue and called it as lack of self-care which is chronic nature. Psychotherapist's role as a care provider and dealing with those individuals having chronic mental health conditions takes toll with a realization that they won't be able to fully recover and be normal in their daily life. As humans we cannot avoid building a relationship with others even if it's purely in professional terms. This leads to a sense of affection and hence the reaction to their inability to improve surges in a negative direction. The result inadvertently will be our lack of interest or withdrawal from bearing someone else's pain and suffering.

Franceschi (2013) brilliantly compared compassion fatigue with dark or heavy clouds in the sky which lose their dimness by a release or outpouring of water. Compassion and fatigue is always related or associated with human vulnerability. Once we recognize the presence of this vulnerability in distress patient, we trigger the emotions of compassion and compassion fatigue. It can be better explained in terms of internalization of suffering and pain which is felt from an observable work environment.

There is a possibility that compassion fatigue may be mixed up with secondary trauma stress which is purely as a result of post-traumatic stress disorder. Avoidance of compassion requires a continuous effort of self-renewal individually because that is one way of clearing yourself from the healthcare practice (Joinson, 1992).

Compassion fatigue cannot be associated or linked with one special area of healthcare rather every area is at risk of having this condition. As human beings, it is in our nature to suffer from any possible reason. The only difference is that the magnitude

and frequency of how much we suffer differs individually and even the way we manage to cope those instances. Having a theoretical knowledge of compassion fatigue is drastically different from the living experiences of it (Franceschi, 2013).

Hilfiker (1985) coined a term traumatic stressors responsible for the conception or formation of compassion fatigue. Those events from which the stressors are as a direct result of the happening of an event specially at the work place is related as primary stressor while experiencing someone else`s trauma is declared as secondary trauma. It can be described as a two way transaction especially when you are dealing with people going through or experiencing trauma. In one of this literatures, Briggs and Peat (1999) addressed this phenomena as butterfly power where small and subtle changes can gradually power into larger effects

Biological pathway of compassion fatigue

Over the period of time and due to the advancement of technology specially in terms of research and diagnosis our understanding of compassion fatigue has enhanced manifolds. The major parts of our brain that gets triggered or activated during compassion distress are those involved in the formulation or analyzing of pain or immediate threat along with medial cingulate region of cortex and amygdala as a whole.

Any action in the body ends up effecting the neurotransmitters or changes in chemical levels. Same is the case during compassion distress or fatigue where the levels of dopamine get severely depressed. This in general could also lead to a stage of burnout. In some other studies this has expanded to activation of the parts related to the secretion of dopamine and oxytocin. It may include nucleus accumbens, orbitofrontal cortex and

anterior singulate. Because compassion is always motivated with the achievement of rewards, prizes or feelings that lead to satisfaction from helping those in need and it is considered a positive emotion hence we can observe those specific rewards associated areas of the brain get activated (Stowen, 2019)

Rocheleau (2015) put forwards the unique concept of reflective and reactive brain. The areas related to the regulation of emotions, analytical processing, abstract thoughts, finding solutions and daily life communication, all are associated with reflective brain phenomena. In counter of that, our life experiences that engulf in stress and fight and flight responses are associated with reactive brain which is also know as the survival center

Healthcare workers or caregivers are always in a state of stress because of the regular engagement they have to procure for those in need. It requires a continuous work under stress, pressure or crisis thus our reactive part of the brain comes under constant fire. This continuous way of brain functioning in a reactive way leads to a lasting change in brain functioning which performs the same way in both personal and professional life focusing less on reflectiveness. The under development of reflective brain will lead to the self-infliction of pain from the trauma of others. This leads to the overburdening of emotions which turns into guilt, self-distrust and the individual becomes emotionally withdrawn as it is the only source of dealing with the situation. This becomes a condition related as compassion fatigue (Rocheleau, 2015)

Compassion stress and fatigue model

The basic underlying premise of this model is the requirement of being empathetic and understanding towards feelings and emotions in order to build a relationship with a patient. It's a two-step process which originates once a caregiver gets to know the patient and gets exposed to the stress or trauma being faced. It is followed up by a caregiver's response which is painted in the depths of empathy. The key aspect of this model is the individual's or caregiver's ability to be empathetic. The more an individual has an understanding of someone's trauma and pain, the more that individual will be susceptible to stress and fatigue related to trauma which will further lead to family, occupational life problems or disruptions (figley, 1995)

Model of secondary stress and trauma

The model is considered very significant and rooted in multiple layers with starting point being the introduction or revelation of stress from the client or a patient. This leads to how a caregiver interprets that stress which is simple words called as cognitive appraisal. The appraisal is something which triggers the caregiver's compassionate mind which forces an action out of it leading to helping, saving the client. It is how a caregiver's cognitive response functions which will lead to either positively or negatively manifesting certain behaviors of psychological, biological nature in a purely social dimensions. Biological manifestations may result in change of hormone or neurotransmitters level namely dopamine, oxytocin, estrogens which in return will activates other systems of the body for a physiological reactions. Negative emotions work their way in the form of low mood, feeling of guilt and a sort of resentment. The

continuation of this process will eventually lead to fatigue both in physical and emotional terms in the form of compassion fatigue (Valent, 1995)

Psychological Wellbeing

If we go back in history we may find many different ways or directions by which people or historians have defined the concept of psychological wellbeing. Aristotle proclaimed it to be the maximum or the peak of reaching the state of happiness and the good what a human is able to do for others. It is actually a very broad term. Early dynamics of literature included several different constructs to form one whole which included accepting oneself as we are and satisfied about it, having a certain focused objectives in life, ability to create, understand and maintain relationships, development in self with the passing of time and having the ability in making your own decision (Ryff & Singer, 2006)

The concept of psychological wellbeing is very practical in life as we experience its presence in everyday working. This makes it very difficult to create its operational structure as many elements can be deemed part of it but not included. It may eventually be defined as a combination of both positive and negative parts or elements of life. Both positives and negatives always exist in pairs. One`s existence is related to another which creates a delicate balance (Warr, 1969)

Huppert (2009) described psychological wellbeing as something which is not uniform or streamline in existence. In general terms, it is how good your life is going. How happy and satisfied you are with it. Along with the psychological aspects, it also includes the daily functioning and performance of an individual. The regular negative

feelings and similar experiences are part of individual's life. It is those negative feelings which persists or linger on for a significant amount of time that can cause issues. Positive or good feelings may have an inclusion of satisfaction with whatever possession an individual has, having a fascination about something, exhibiting self-confidence and having the capacity to reach one's own potential with a direction and an autonomy over life

Psychological wellbeing can be attributed as an amalgamation of emotional states of pure positivity which leads to an efficient performance in life. Those with elevated degree of psychological wellbeing tends to have abundance of positive emotions in comparison to negative ones. The outcome is not just related to individual's psychology but with biology as well. The functioning of different brain areas, the performance of different biochemical naming hormones, neurotransmitters and even the development and transference of positive trait genes (Winefield et al., 2012)

We can express and explain psychological wellbeing keeping in mind the work conducted by previous scholars. Their work is a guiding stone for researchers and readers who want to understand the concepts from current perspectives. We can look into psychological wellbeing as in point of Abraham Maslow's construction of the concept of self-actualization. We can evolve our understanding of psychological wellbeing from the eyes of Carl Rogers and this view of a full independent and functioning person. Similarly we can look into the development of individualism concept by Carl Jung. These are basic structures of what positivity and wellbeing can eventually mean (Ryff, 1989)

Psychological wellbeing has different dimensions and relationships which in return will impact its effectiveness and workings. It may depend on the developmental stage of an individual, moving from childhood to adult life and even further. The concept and understanding of life changes drastically and so is the meaning of wellbeing. It may also be impacted by the kind of personality an individual possess. Some may require an abundance of satisfaction while others may be content with what they have. One aspect are the experiences where an individual's growth has taken place. Experiences tend to leave an impact and a mark on people and how they see and view different life ideologies. We can also draw a light to the impact of social surroundings on the understanding of wellbeing. The culture, society, workplace all has their own share in formulation of psychological wellbeing (Ryff, 2014).

Analyzing different mental or thought process along with their emotional state comes under the domain of psychological wellbeing. It is something which is subjective in nature and may differ for individuals. The overall thought and belief patterns around which an individual spends its life. (Diener & Faujita, 1995)

The impact of studying psychological wellbeing goes truly and well beyond the social sciences field. It is often compared and associated with quality of life. Many different field of studies like economics and organizational influence has also versed about wellbeing and focused on issues more than just monetary and status (Dasgupta, 1993).

Psychological wellbeing is not individual. It should not be seen from the lens of an individual eye. It is collective in nature. The basis of its formation and the elements

involved in it suggest a very strong socio-cultural element so it is beyond an individual thoughts and processes but rather it's the social-cultural norms, relationships, practices that plays a significant role in its conception (Kavedzija, 2021).

Brown and Ryan (2003) has stated that the concept of psychological wellbeing cannot be understood without the knowledge of mindfulness which is described as being aware and being present in here and now or in the current reality devoid of any thoughts relating to the past or being concerned about the possible events of the future. The relative application of mindfulness becomes a driving force in determining psychological wellbeing among individuals. Being aware and being fully present helps in understanding, focusing, analyzing, appraisal and significant improvement of behavioral, cognitive and social functioning.

Biological pathway of psychological wellbeing

Understanding the neural pathway of psychological wellbeing requires pure comprehension of the human biology and different elements of human physiology. Upon investigations using the available modern technology it has been found that psychological wellbeing brings in the increase of gray matter or its volume in the brain region of insula. There has been multiple studies of how wellbeing impacts various region of cerebral cortex (King, 2019).

Brain is indeed a very complex structure. Every structure or a neural circuit has its own functions which sometimes even overlaps into primary and secondary. Limbic system is usually called as the emotional center of the brain which include amygdala, hypothalamus, hippocampus, basal ganglia. Different studies have shown unusually

larger activation of left prefrontal cortex when an individual is going through positive emotions whereas it's the opposite when it comes to negative emotions which activates right prefrontal cortex (Davidson, 1992)

Body functioning is very much related to the activation and deactivation of neurotransmitters. Many studies have been conducted just to ascertain the functions of different types of neurotransmitters. When related to psychological wellbeing, higher the score in relation to positive wellbeing, higher the level of cortisol. Another hormone which is commonly known as happy chemical, serotonin is said to be in abundant level when an individual is going through positive emotions whereas one major cause of depression which is a negative emotional state is said to be caused by low serotonin level (Huppert, 2009)

PERMA model

Seligman (2018) presented the renowned model or idea of wellbeing and how it formulates. In its premise it relates the combination of five different elements which are the core for any wellbeing. It begins with positive emotions which one can state as anything that can instill positivity in individual or certain events that has a sort of positive impact. It is followed up by engagement which is how much you are interested in life activities or work or any task you are doing. The ability to develop, understand and maintain relationships during every thick and thin is a sign of a positive individual's wellbeing. The relationship an individual has draws so much impact not just in the moment but throughout life as a whole. It implants personality elements which is desirable for individual social functioning

Meaning on the other hand is something of an abstract phenomena in an entity`s existence. It can be a real source of strength and resilience. Having an utmost faith and confidence on something higher which in a way is religious and spiritual. The final element relates to an individual`s accomplishment in their life. Achieving good in life or struggle to reach to a set goal or objective creates a sense of positive psychological wellbeing. Achievements can be in any scope or field of life (Seligman, 2018).

Resilience

For centuries human being has faced travesty in all shapes and forms. From war to famine to pandemics and yet they tend to survive and emerge stronger than ever. That ability to fight back is termed as resilience. In specific it is an ability of an individual when faced with travesty to go through the process of fight back and adapt in a positive way (Herrman et al., 2011)

Study of resilience has been dynamic in nature with different fields researching on it from their fundamental perspectives. The subjective nature of its operational definitions makes it even more interesting to understand and study about it from the view of different school of thoughts. Many viewed the kind of travesty or adversity being faced, ,many considered resilience as something related to genetics while others called it as a learning process of individual`s life. Further even included the types of negative events or the severity of it (Herrman et al., 2011)

Maneya (2006) associated resilience with the impact of disasters which could be either manmade or natural. The inclusion of the word disaster holds meaning as it treats or views the concept from a focused eye. The impact of society during that disaster

recovery and how it creates an impact both individually and collectively was a key focus on resilience study.

Holling et al. (1995) represented resilience from an ecological perspective on how when a system faces a brutal shock it tends to fight back. The buffer nature of the system and how the emergency measures installed works during an emergent situation. Resilience becomes the overall capacity of a system to buffer and respond to any pressure it faces.

Another view of assessing and understanding resilience was from the way of organizations. An organization is merely a combination of individuals working in a formal structure for the personal and collective achievements of goals. How each individual faces travesty is how the organization response to a challenge is. It is the ability to fight and resist jumping into such actions or conduct which is negative or in specific terms aversive in nature (Home & Orr,1998).

Mallak (1998) focused purely on the individual or organization`s ability to function in a stressful situation by formation, structuring of accommodative behaviors or actions which is of positive nature and making sure that they avoid taking smallest bit or minimal damage or negative repercussions from the pressures.

Studies have identified what disaster means and included in the causation of a natural disaster or an outcome which causes destructive loses on human side along with the inability of the community or locals to produces good for survival that leads to the adverse effects on the individual`s life standard without any help or support from external world. Resilience is the human ability to resist and survive this (Miletti, 1991)

Human life goes through many stressors which can vary depending on the severity of it. Some come out unscathed while others suffer from it in a brutal way. The impact of these traumatic affairs or stressful incidents or in severe cases PTSD can have a harsh biological, psychological, neurological effects leading to adverse functioning. Resilience is a triumphant management among these events (Wu et al., 2013). Werner (1995) studies specially focused on children and adolescents while explaining resilience as ability to cope and withstand persistent pressure or stress, ability to regain the grip of life from a traumatic experience and formation and maintenance of positive life skills.

Hornor (2016) expressed resilience to be an ever changing multiple layered dynamic concept which can be ascertained on an individual level as a fight back against different life stressful conditions or some circumstances which have inherent risks. Collectively it is recognized in an organizational form where the environmental stressors cause the structure to respond making it more persistent.

There have also been a lot of studies on resilience especially among children. Children being very vulnerable to new experiences require extra care for the development of their defenses. Resilience development is basically a way of protection among children and it depends on their individual analytical, mental processes functioning, the kind, caliber and quality of social comfort through relationships they are absorbing and the settings, conditions and environment they are being raised and developed (Greenberg, 2006).

Goldstein and Brooks (2013) created an opinion that ability of resilience is actually functional in decreasing or lowering individual fragility which could be many environmental factors or biological shortcomings

It is important to understand how you are defining resilience because due to its subjectivity the nature of each view could be different. Three possible ways to look into resilience is by way of genetics or inherent, a lifelong process that an individual goes through facing many healthy or negative adversities and resilience can finally be termed as a developmental consequence of your life events (Southwick et al., 2014).

The presence of resources and the process involving an individual's ability to utilize those resources whether in abundance or scarce to effectively raise, manage and maintain wellbeing can be termed as resilience (Brick, 2014)

Biological pathway of resilience

To understand the neurobiology of resilience one must have a grip on the concept of neuroplasticity which is referred to as the ability or the mechanism of the brain to adapt to change. Plastic as we all know can expand, contract and mold into any shape of form, hence the association of brain with plastic was created for a clear understanding. Neuroplasticity is the central concept which lays foundation for resilience which is an individual's capacity to fight back even in the most difficult of times (Russo et al., 2012)

Three areas or centers of the brain are responsible for the formation and development of resilience in an individual. These are hypothalamus, pituitary gland and adrenal gland which is collectively called as HPA axis. Resiliency is a result of stress and during stress hypothalamus gets activated to secrete corticotrophin which mediates with

adrenocorticotrophin released from pituitary gland to prompt production of cortisol from the adrenal gland. The major function of cortisol is the regulation and control of stress at a manageable level and to create resilience against the onslaught of external stressors. In addition to these responses, body also actively secretes testosterone which is considered as a natural stress manager and increases the neuroplasticity in an individual (Cathomas et al., 2019)

Davidson (2000) worked to understand the neural communication between different brain parts namely amygdala and prefrontal cortex. More communication led to a better resilience in an individual. This was complimented by the presence of increased amount of white matter between the brain area of amygdala and prefrontal cortex which signifies that the increased amount of white matter would lead to an increased or better resilience against stressors.

Norman Garmezy`s theory of resilience

One of most well-known psychologist of his time, Dr. Garmezy considered resilience as the stability of emotions and maintenance of behavior while going through severe psychological issues. It is in contrast to what was considered resilience at that time which was termed as a sort of bravery in difficult times. The inclusion of impacts from setbacks as a result of calamity both at individual or collective level made the concept of resilience more relatable among people provided that an individual returns to fight back those setbacks (Rolf & Glantz, 1999)

Literature Review

A research was carried out during the events of covid-19 pandemic trying to identify the relationship between altruism and how emotions are regulated especially when participants were going through compassion fatigue. The outcome of the research highlighted that compassion fatigue had a meaningful impact on altruism. Those identified with a higher level of compassion fatigue were donating more money as charity compared to others which could be possibly explained by a feeling of immense guilt. Another finding was the role of emotional regulation as a moderator among different individuals (Tabani, 2021).

Similarly in a study, through rigorous training of participants with a focused approach, compassion was generated which later was seen to develop altruism in participants who got involved in donation of funds to victims. Hence a result can be oriented that both compassion and compassion fatigue can find its way to link with altruism (Weng et al., 2013).

Likewise in another study where a focus was on finding the impact of altruism in those healthcare workers risking their lives during covid-19 revealed a marked positive association between the impact of altruistic behavior and the tendency to be compassionate along with the inducing of compassion fatigue. In addition the issues of stress related to psychological functioning were positively correlated to individual's tendency to burnout and emotional exhaustion which can be related to as compassion fatigue (Ishfaq & Ahmad, 2023).

Another study which was conducted by Papzoglou et al. (2019) specifically on the police officers in Finland who are prone to exposure in violent or dangerous situations. Focus was on identifying the effect of different distinct character attributes or traits on fatigue related to compassion. The results were interesting as personality traits which were deemed to be negative was said to have a negative correlation with compassion fatigue and they were also identified as variables which can be used to forecast the presence of compassion fatigue. Similarly positive personality traits like altruism was found to have a positive correlation with compassion fatigue.

One study indicated empathy which is considered as an attribute of altruism is significantly responsible for the prediction of compassion fatigue. The research was carried out on clinical workers and it was further explained how the role of their life experiences specially the distress and trauma plays a role of a mediator (Thomas, 2013). Likewise a research study among nurses by Mottaghi and Poursheikhali (2019) yielded similar results in Iran where empathy related to altruistic personalities was found to have an association with compassion fatigue. The explanation in this particular instance is the presence of survivor guilt or a feeling of being entitled with all the resources in comparison to the patients and hence it will end up disrupting the relationship between patients and health workers.

Another study with the same objectives was conducted in Korea among social workers related to medical field. The results were different in comparison to other studies as it identifies altruistic empathy to be negatively correlated with compassion fatigue and burnout whereas further analysis indicates the presence of any personal traumatic experience in the past having an association of positive nature with compassion fatigue

(Yi et al., 2019). A study in Pakistan conducted by University of Punjab among rescue 1122 workers showed similar results where altruistic empathy had a negative correlation with symptoms of anxiety, depression and stress which shows that increased empathy leads to an individual to perform pro-social behavior which indirectly impacts psychological wellbeing in a positive way (Ahmad et al., 2015)

A research study by Zhang et al. (2017) was undertaken in order to find the association between different psychometric characteristics of individuals with compassion fatigue and burnout. The participants all had a good altruism score which was part of the inclusion criteria. The results indicated in terms of gender that occurrence of burnout and compassion fatigue is found to be high in female participants in comparison to male whereas the role of education as well considerable training was found to positively influence in helping the participants which were nurses in regulating the negative aspects of stressors.

A research conducted by Kahana et al. (2013) looked into diverse positive personality attributes and found the association between attitudes which are altruistic in nature and life wellbeing which could include quality and overall satisfaction. Not just an association but altruism also acts as a significant indicators or predictors of wellbeing which is positively natured but didn't find any significant correlation when it comes to negative wellbeing.

Likewise a similar study dived into the concept of wellbeing of existential nature and found that the presence of altruism in an individual can lead to the cultivation of existential comfort in terms of thoughts and surroundings (Xi et al., 2016). Similarly an

Indian researcher Lakshmi (2013) worked with the dynamic Indian culture attributes and tried to find an association with altruism. The result was significant in identifying that altruism was positively associated with the Indian concept of `Dana` where it enhances the positive attributes of the personality like engaging in different social relationships, enhancing insight, finding life goals or objectives and many more. This also ascertains that the positivity will always seep into the classes or communities irrespective of the cultural background.

A familiar organizational research was conducted from an Islamic perspective where the impact of altruism was studied along with ihsan on the individual psychological wellbeing. The results illuminated the need for the trait altruism to be present in lecturers while hiring because it enhances the positive components of the personality and specially in an organization it can enhance positive relations among management and workers leading to a better outcome or productivity (Mokhtar et al., 2020).

Massey et al. (2010) found out how the process or exercise of organ donation which is an altruistic act significantly impacted the psychological wellbeing in a positive manner and had absolutely no drawbacks of psychological nature from an organ donation. The study also signifies the value of the concept of donation on the personal upbringing and society as a whole provided that it is purely altruistic in nature. A recent study which specifically featured adolescents carried importance due to the different developmental phases adolescent passes by having different significant impacts on the personality formation. The impact of altruism during the developmental stages of adolescent was rarely studied. The results clearly indicated that altruism or performance

of kindness filled acts was positively correlated with positive wellbeing and further the presence of altruism in adolescents acts as a moderator in a way that it impacts stress, burnout and affects of both positive and negative nature (Tashjian et al., 2020).

Abundance of research studies were carried out during Covid-19 on the act of selflessness or helping others without any form of monetary or abstract payback which is commonly known as altruism. Similar study was conducted in United Kingdom when during strict lockdown measures loss of jobs were at its peak. The community servicing active during that phases helped a lot of individuals. The involvement of financial support and different forms of charity was instrumental. It was found from the data that the measures of altruism by the individuals helped in increasing their wellbeing of subjective nature which resulted in more individuals from different and ethnic background willing to help and support others (Giovanis & Ozdamar, 2020).

In another study Nathan (2015) stated that altruism is something which is beyond and above the scope of religion. It is something which is not just specific to religion but its associated to humanity as a whole. The significant impacts relating to the performance of altruistic acts can lead to better individual happiness, stress control and better emotional regulation. Findings of the research study indicates the presence of positive correlation between altruism and psychological wellbeing.

Though there are many positives of altruism on psychological wellbeing but the overabundance of its application and use can have its drawbacks. Research by Fend et al. (2020) was performed during covid-19 among university students which concluded that participants with increased level of altruism tend to have an adverse or negative impact

on mental health. This may lead to different signs which may indicate the presence of depression and anxiety.

Likewise a study by Davis (1983) highlighted how in individuals where altruistic acts are under the influence of empathy can lead to a decline of psychological wellbeing. There are instances where it is also a cause of emotional exhaustion.

Gil et al. (1998) in his research focused on different version of altruism. He concluded that those altruistic acts performed based on the feelings of guilt or in certain cases where individuals don't want to be negatively evaluated can lead to decreased mental health or emotional distress.

According to Schwartz (2015) who studied the whole concept of self-sacrifice and was totally against the notion of individual gain at an expense of someone's loss. It was pointed out that individual with a self-sacrificial altruistic tendency can eventually ignore their own needs and desires leading to a situation of negative psychological wellbeing such as burnout and emotional distress.

Labrague and De los santos (2021) conducted an investigation in order to understand the role of resilience throughout covid-19. The function of healthcare workers specially nurses became very significant during the pandemic. They were like the frontline soldiers during war. The results explicitly indicates that resilience play a central role in protecting healthcare workers specially nurse who were working in health centers dealing with covid-19 patients. Role of resilience from the results identified it as a mediator and it helped in decreasing the negative effects which comes along stress or compassion fatigue during the job.

A similar research study was conducted in an organization which emphasized the purpose of resilience and its influence during stress and extreme workload provided that the working environment in the organization provided the necessary support for those in need along with the role of constructive supervision (Kapoulitsas & Corcoran, 2015).

Another covid-19 study worked on finding moderating influence of resilience between exhaustion or burnout and compassion fatigue and the results indicated that no such moderating of function of resilience could be determined among healthcare workers however the role of resilience was found to be that of a predictor of personality dissociation which is derealization and depersonalization (Char, 2023).

Similarly a research work by Kashyap and Kumar (2014) was able to recognize the role of resilience as a moderator when studying organizational or occupation related stress and wellbeing of psychological nature. Stress during work specially when lingered can cause serious issues both physically and psychologically. The impact of resilience as a moderator will help in managing or coping it in a much better way.

Izquierdo et al. (2017) conducted a study among nurses working at different hospitals specially those who were suffering from a severe cases of long-term stress and found out the significant moderating influence of resilience between burnout, stress, fatigue, skepticism. The role of resilience hence can be called as a safeguard or a guardian. The study was significant in developing training programs to further strengthen resilience among nurses.

Rationale of the Study

This research study aims to inquire the connection or association between altruism, compassion fatigue and psychological wellbeing among psychologists. In addition it aims to further investigate the impact or influence of resilience as a moderator..

Prior research studies have demonstrated that altruism or the excessive application of altruism can lead to stress or burnout and inadvertently have significant impact on mental health and overall wellbeing. However few studies have investigated the relationship of altruism with compassion fatigue. This along with psychologists as population in research studies has been scarce. Psychologists working in Pakistan at different autism, addiction and rehabilitation centers are being over utilized with few monetary incentives without realizing the possible impact of that overburden on the individual`s life as a whole. Therefore this study will specifically target psychologists to investigate the association among altruism, compassion fatigue and psychological wellbeing.

Investigating the role of resilience as a moderator is very significant considering its not been studied in detail much from the angle of its impact on the relation of altruism, compassion fatigue and psychological wellbeing. Resilience is the individual`s ability and will to fight back when faced with stress, travesty or disaster. The act of not giving up. Hence studying the role of resilience in psychologists becomes very much important in situations where they are overburdened with stressful work.

Problem Statement

Psychologists are often prone to experience emotional distress due to intense or high level of altruism essential in their profession. This excessive altruism may result or lead into compassion fatigue and diminished psychological wellbeing eventually affecting their mental health and professional efficacy. This study seeks to investigate the interplay between altruism, compassion fatigue, psychological wellbeing, and to examine the moderating influence of resilience in mitigating these effects and preserving professional functioning.

Significance of the Study

Examining the connection of altruism and compassion fatigue can cast a light on how the sustained application of altruistic actions or behavior can lead to a situation where it becomes impossible for the individual to have empathy or feel sympathy towards patients in distress. Altruism is considered a positive trait in every aspect of life but the excessive presence or usage of it can introduce a feeling of burden. This study may help in putting further some focus on it.

Similarly this research will hopefully be significant in finding out how the presence of altruism can impact the psychological wellbeing whether positively or negatively. If it is helpful in creating positive wellbeing then organizations, academic institutions can introduce programs, training session to promote altruistic actions.

Examining the moderating role of resilience can identify a potential target for intervention strategies aimed at reducing compassion fatigue as well as negative psychological wellbeing by fostering the development of resilience in individuals who

may be effected by workplace stress and other personal issues. The findings of this research can also motivate different institutions or organizations to seek or identify those individuals with more resilient tendencies to deal with different stressors or face conditions that can cause adverse psychological issues.

This study assists in incorporating additional information to the literature on altruism among psychologists by investigating its relationship with compassion fatigue and psychological wellbeing. The findings can help advance different theoretical frameworks and models of all the individual variables in this study thereby resulting to an in-depth insight of the underlying mechanism at play.

Objectives

The objectives of this research concerning the relationship of altruism, compassion fatigue and psychological wellbeing among psychologists with the moderating role of resilience are as follows:

1. To assess the association between altruism, compassion fatigue, psychological wellbeing and resilience among psychologists
2. To investigate the predictive relationship of altruism with compassion fatigue and psychological wellbeing among psychologists.
3. To determine the presence of significant gender based mean difference
4. To examine the moderating role of resilience in the relationship between altruism, compassion fatigue and psychological wellbeing

Hypotheses

The hypothesis of the present study is as follows:

1. Altruism among psychologists is positively correlated with compassion fatigue and resilience, while it is negatively correlated with psychological wellbeing.
2. Altruism significantly predicts compassion fatigue and psychological wellbeing among psychologists.
3. There will be a significant gender based mean difference of compassion fatigue and psychological wellbeing among psychologists
4. Resilience moderates the relationship of altruism with compassion fatigue and psychological wellbeing such that the negative impact of altruism is reduced among psychologists with higher resilience.

Conceptual Framework

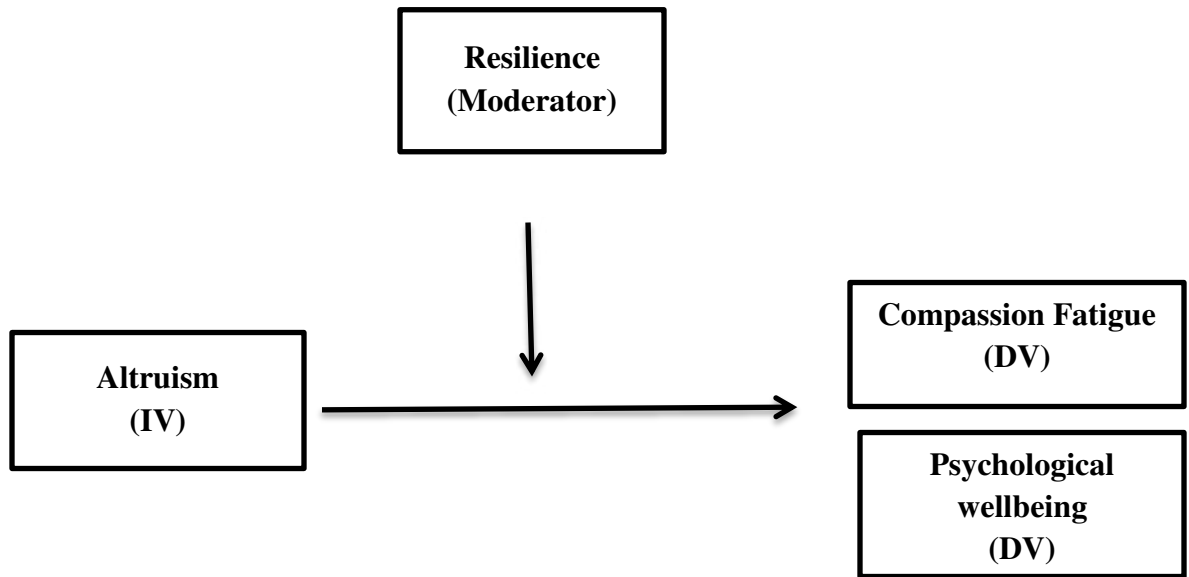


Figure: Conceptual framework depicting relationship among variables

METHOD

Research Design

The research study was a quantitative cross-sectional survey design for the examination of the association between altruism, compassion fatigue and psychological wellbeing among psychologists with moderating role of resilience. Self-reported questionnaires were used on the basis of which inferences were drawn.

Population

The aim of this study was to examine the association between altruism, compassion fatigue and psychological wellbeing with understating the influence of resilience as a moderator. The target population of this research consists of psychologists working at different public or private settings (autism, addiction, rehabilitation centers and psychiatric wards) in Islamabad and Rawalpindi with an equal distribution of male and female participants

Due to the constraints such as resources, time and accessibility, it is impractical to examine the entire population of psychologists. In order to accurately represent the population as a whole, a cohort of 80 participants were selected.

Sampling

The sample was selected using a purposive technique that enables participants to be included based on their accessibility, willingness and specific attributes to participate

in the study. It is essential to recognize that the outcome may not be generalizable across the whole population

The research seeks to collect relevant data and investigate the relationships between altruism, compassion fatigue and psychological wellbeing along with ascertaining the role of resilience as a moderator using a sample size of 80 psychologists; The sample comprises an identical count of male and female participants. The sample size of 80 psychologists is adequate for the present study considering how difficult it is to access practicing psychologists due to their workload and limited availability. In addition the inclusion criteria also narrowed the possible pool of participants. The sample size is also consistent with a previous research study conducted by the Clinical Psychology Department of Riphah International University in Lahore where a sample size of 100 young clinical psychologists were selected out of which 80 responded to study the relationship of quality of life, empathy and coping strategies (Ikram et al., 2023). The results of this sample shed light on the population under investigation, but caution should be exercised when applying the results to a larger population.

Inclusion Criteria

1. Participants are psychologists holding a minimum of recognized Master`s degree in Psychology, having a relevant diploma or are clinical psychologists.
2. Participants have an experience of atleast 2 years of clinical practice.

Exclusion Criteria

1. Participants taking any psychiatric medication will be excluded from the study
2. Participants with a background in unrelated field

3. Participants who are trainee or students

Operational Definition

Operational definition is the way in which a meaning is given to a construct or it can be further elaborated as conversion of a construct into a measurable form. In the research study exploring the association between altruism, compassion fatigue and psychological wellbeing among psychologists with a moderating role of resilience, the variables were operationally defined as follows:

Altruism

Altruism can be defined as an intention, action or commitment for the betterment of other human beings without any self-interest involved in it (Pessi & Saukko, 2014). It is the total score ranging from 0-33 after the addition of responses produced by the participants. Higher scores indicate a considerable presence of altruistic tendencies in an individual. Altruism will be operationalized in terms of Generative Altruism Scale (Bussing et al., 2013)

Compassion Fatigue

The notion of compassion fatigue relates to the feeling of exhaustion and emotional numbness specially influencing healthcare workers due to abundant or continuous exposure in a situation where others are suffering (Cocker & Joss, 2016). It is a sum total of scores ranging from 16-80. Higher scores indicate an increased level of compassion fatigue in an individual. Compassion fatigue will be operationalized in terms of Compassion fatigue Inventory (Eng et al., 2020)

Psychological Wellbeing

Psychological wellbeing points to as the individual's ability to have feelings of positive nature, ability to develop emotions and feelings which gives a positive sense to oneself and to operate efficiently in life (Huppert, 2009). It is a total score ranging from 7-35 after summing up the responses from the participants with higher scores indicating a higher psychological wellbeing. Psychological wellbeing will be operationalized in terms of Short Warwick-Edinburgh Mental wellbeing scale (Collins et al., 2012)

Resilience

Resilience is described as the capacity to fight, recover or rebound when faced with different life challenges and to adopt in circumstances with the available resources (Herrman et al., 2011). It is a sum total of scores ranging from 6-30 with higher average score pointing towards higher resilience. Resilience will be operationalized in terms of Brief Resilience Scale (Smith et al., 2008)

Instruments

Generative Altruism Scale (GAIS)

Generative Altruism Scale (GAIS) originally created by Bussing et al. (2013) to measure or assess altruism which is explained as a persistent dedication and faithfulness towards helping others in need with the sole basis of being compassionate without having a hint of any self-interest.

The suitable age range or scope for this scale young and healthy adults. It is a 4 point likert scale with 11 items or questions to be answered by the participants. The sum

total of minimum score is 0 and the maximum score is 33. The scoring options include: (0) Never, (1) Sometimes, (2) Often, (3) Very often. There is no presence of subscales and neither any reverse coded negative items are present.

The GAIS has a healthy internal consistency of Cronbach alpha of 0.81 along with an outstanding validity showing strong associations or correlations with other measures. There is no urdu translation available for this scale. Permission was requested for the usage of this scale from the authors via email.

Compassion Fatigue Inventory (CFI)

The Compassion Fatigue inventory was originally created with an intention to assess compassion fatigue among practicing psychologists. Eng et al. (2020) constructed the questionnaires with the intention of measuring compassion fatigue which was defined as the decline in professional functioning due to over exposure in stressful situations while dealing with patients leading to the feeling of emotional numbness and withdrawal from social situations. People who work as caregivers or offer emotional support to others may experience compassion fatigue, a condition that results in feelings of emotional depletion and a diminished ability to empathize. A measure of compassion fatigue among caregivers, medical professionals, and those in caring professions is the Compassion Fatigue Inventory (CFI).

Compassion fatigue inventory has a total of 16 items with 5 point likert options for responses. The score ranges from a minimum of 16 to a maximum of 80 with scoring options including: (1) Does not fit at all, (2) Fits poorly, (3) Fits partially, (4) Fits fairly well, (5) Fits perfectly. Larger scores indicate a higher level of compassion fatigue

among the individuals. Three items out of 16 which are related to workplace are negatively or reverse categorized. The inventory is most suitable for working adults in healthcare settings.

During administration participants were asked to provide their honest response of each item and to rate the extent to which they currently experience the described conditions. Compassion Fatigue Inventory has an impeccable internal reliability of Cronbach alpha 0.91 along with a strong validity showing significant associations with other variables or measures. There is no urdu translation available for this inventory. Permission was asked for the usage of this scale from the authors or creators through an email.

Short Warwick-Edinburgh Mental Well-Being Scale (SWEMWBS)

Developed by researchers at University of Warwick and Edinburg in 2006 and later updated by Taggart et al. (2015) as a self-rating instrument to evaluate the performance, psychological functioning as well as the individual wellbeing. Psychological wellbeing is has a subjective reference to many but generally it is termed as having a positive emotional, mental states along with the lack of negativity among thoughts coupled with a positive and productive life experiences (OECD, 2013). It is a popular instrument for evaluating mental health across a range of demographics. A condensed form of the original Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) has been approved for use in a variety of contexts, including clinical practice and research.

The scale is suitable for individuals aged 16 and above which specifically includes young adults and general population comprising of 7 items with 5 point likert answering mechanism with a minimum score of 7 and a maximum score of 35. The raw scores are converted into metric scores with higher metric indicating a healthy psychological wellbeing. The scoring options for the participants to choose includes: (1) None of the time, (2) Rarely, (3) Some of the time, (4) Often, (5) All of the time. There are no presence of subscales and neither any reverse of negative coded items.

The SWEMWBS has an high internal consistency of Cronbach alpha 0.89 with good and positive construct, convergent and concurrent validity. There is no urdu translation available for this scale. Permission for the usage of this scale was requested from the authors through an email.

Brief Resilience Scale

Smith et al. (2008) devised the Brief Resilience Scale with an aim to assess or measure the individual`s ability to fight back when faced with adversity. Resilience is further described as the process of adaptation in circumstances where individual is facing taxing or intense events in life (Wu et al., 2013). It is a quick and simple test that can be used to assess resilience in a variety of clinical and research contexts. Clinicians can use the BRS to find patients who might profit from interventions that promote resilience.

The suitable age for the application of the Brief Resilience Scale is 18 years or above with the instrument having a total of 6 items consisting of three positively phrased and three negatively phrased items. The negatively worded items are scored using the process of reverse coding. The scoring ranges from a minimum of 6 and maximum of 30

with the final score obtained by finding the mean score. Based on the mean score, the results are categorized into low, normal and high resilience. The statements of the scale has the following set of options: (1) Strongly disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Strongly agree. There is an absence of subscales.

The Brief Resilience Scale has a good internal reliability of Cronbach alpha ranging from 0.80-0.91 with validity being confirmed empirically with high associations between different variables. There is no urdu translation available for Brief Resilience Scale. An email was sent to seek permission for the usage of this scale from its authors.

Demographic Sheet

Different additional demographic variables such as age, gender, educational background, marital status, family structure, working experience, socio-economic status, cultural backgrounds and work setting of participants are incorporated.

Procedure

Participants working at different autism schools, addiction centers and psychiatry wards were approached by the researchers after the permission was granted by the relevant authorities. A brief introduction was given about the research and its significance after which all participants provided informed consent. Following informed consent data was gathered from the participants and any uncertainty regarding items was cleared the participants were specifically asked to respond with utmost honesty and sincerity and after the completion of the process, they were acknowledged for their assistance and participation. In order to determine the results, SPSS was used for Pearson correlation coefficient test and simple linear regression analysis with the purpose of understanding

the relationship between altruism, compassion fatigue and psychological wellbeing along with the moderating role of resilience.

Data Analysis

Statistical methods were used to analyze the quantitative data. Distributions and characteristics of the variables were analyzed in the sample using descriptive statistics. The association between altruism, compassion fatigue and psychological wellbeing was examined using correlation analysis. The strength and direction of the association was determined by computing correlation coefficients (e.g. Pearson's correlation). Multivariate multiple regression was conducted to model the relationship and simultaneous examination of altruism's effect on both dependent variables compassion fatigue and psychological wellbeing. It also helps in identifying predictors as well. Using independent sample t-testing we can identify if the mean difference between the two group of male and female is significant or not. Using the PROCESS analysis in SPSS we can assess whether resilience moderate the association between altruism, compassion fatigue and psychological wellbeing among psychologists. Data was analyzed using IBM SPSS (25th Version).

Ethical Consideration

Ethical approval was obtained from Ethical Review Board, Department of Psychology, IIUI and Ethics Committee of International Islamic University, Islamabad. Additionally, all necessary information was provided to the participants and written declaration regarding consent was take with a total affirmation and assurance regarding privacy and confidentially to the process and gathered data. To ensure confidentiality, the

data collected was not shared with anyone and the names of the participants were nowhere mentioned in the report of data file.

RESULTS

Table 1*Sociodemographic Characteristics of Participants (N=80)*

Variables	Categories	<i>f</i>	%
Gender			
	Male	40	50.0
	Female	40	50.0
Age			
	23 – 27	33	41.5
	28 – 32	31	38.8
	33 – 38	16	19.7
Marital Status			
	Single	49	61.2
	Married	31	38.8
Educational Background			
	Masters	65	81.3
	PhD	15	18.7
Socioeconomic Status			
	Upper Class	16	20

	Middle Class	61	76.3
	Lower Class	3	3.7
Cultural Background			
	Punjab	43	53.8
	Sindh	6	7.5
	Pushtoon	14	17.5
	Federal	17	21.2
Family Structure			
	Joint	18	22.5
	Nuclear	62	77.5
Work Experience			
	2 Years	33	41.3
	3 Years	31	38.8
	4 Years	15	18.8
	5 Years	1	1.1
Work Setting			
	Autism Center	50	62.5
	Addiction Center	13	16.3
	Hospital (Psychiatric Ward)	11	13.8
	Private Clinic	6	7.4

Table 1 represents the demographic information about the respondents; a comprehensive examination of the sociodemographic profile among a cohort of 80

participants was conducted. The age distribution revealed a majority falling within the 23 to 27 year bracket (41.5%), followed up by almost even 28 to 32 year bracket (38.8%) and a smaller representation age bracket of 33 to 38 years (19.7%). Gender distribution was equally assigned with Male and female at 50%. Marital status revealed that majority of the participants was single (61.2%) while the remaining were married (38.8%).

Educational background was predominately Masters (81.3%) and remaining were PhD qualified (18.7%). Socioeconomic status revealed a majority of the participants falling in the middle class (76.3%), followed up by upper class (20%) and lower class (3.7%). Majority of the participants culturally identified themselves belonging to Punjab (53.8%), subsequently followed by Federal administered areas (21.2%), Pushtoon (17.5%) and Sindh (7.5%). Overwhelming majority of the participants are settled under a Nuclear family system (77.5%) while remaining participants belonged to Joint family system (22.5%).

The working experience of the participants were almost evenly divided between 2 years (41.3%) and 3 years (38.8%) while remaining participants were found to have 4 years of experience (18.8%) and one participant had a 5 years' experience. Majority of the participants are employed at Autism Centers (50%), followed up by Addiction Centers (16.3%), Hospital (Psychiatric Wards – 13.8%) and Private Clinics (7.4%).

Table 2*Psychometric Properties of Study Major Variables (N=80)*

Measures	<i>k</i>	α	Range		<i>M</i>	<i>SD</i>	Skew.	Kurt.
			Min	Max				
GAS	11	0.70	12	30	19.04	3.57	0.90	1.68
CFI	16	0.94	18	68	41.05	11.71	0.24	-1.20
SWEMWS	7	0.86	15	35	24.19	4.21	-0.17	-0.04
BRS	6	0.88	12	29	21.86	4.72	-0.87	-0.41

Note. GAS = Generative Altruism Scale; CFI = Compassion Fatigue Inventory; SWEMWS = Short Wewrick Edinburg Mental Wellbeing Scale; BRS = Brief Resilience Scale; Skew = Skewness; Kurt = Kurtosis

The results in the Table 2 show that all the scales i-e, GAS, CFI, SWEMWS and BRS show satisfactory to high reliability coefficients ranging from 0.70 to 0.94. The reliabilities are good and acceptable. The highest mean value among scales is of CFI which indicates that the participants have responded high on it whereas CFI also has the highest SD i-e 11.71 which means the variability among responses is most prominent in this scale. GAS has the lowest SD value among scales which identifies homogeneity of responses on this scale

As far as skewness is concerned GAS and CFI have positive values whereas SWEMWS and BRS have negative values but the values fall between the range of -0.87 to 0.9 which is among the range considered acceptable for skewness. Similarly the value of kurtosis for all scales falls between the range of -1.2 to 1.68 hence within the acceptable range for kurtosis. Thus it can be concluded that there was a normal distribution of data and parametric testing can be performed on it. Therefore, decision

was taken to proceed for further analysis with normality established for the data of the present study.

Table 3

Correlation of Altruism with Compassion Fatigue, Psychological Wellbeing and Resilience. (N = 80)

Variable	1	2	3	4
1.Altruism	-			
2.Compassion Fatigue	.34**	-		
3.Psychological Wellbeing	.26*	-.51**	-	
4.Resilience	.40**	-.37**	0.51**	-

Note: Correlations marked with an asterisk () were significant at $p < .05$ where as those marked with an asterisk (**) were significant at $p < .01$*

Table 3 indicates correlations between different variables, their strength and direction. It shows that altruism has a significant positive relationship with compassion fatigue ($r = .34$, $p < .01$), psychological wellbeing ($r = .26$, $p < .05$) and resilience ($r = .40$, $p < .01$).

The above results also indicates that compassion fatigue is significantly negatively correlated with psychological wellbeing ($r = -.51$, $p < .01$) as well as resilience ($r = -.31$, $p < .01$) which explains that the increased level of compassion fatigue will lead to a decrease in psychological wellbeing and resilience. A significant positive correlation was also found between psychological wellbeing and resilience ($r = .51$, $p < .01$).

Table 4

Gender Differences on mean scores of Compassion fatigue and Psychological wellbeing (N=80)

Variable	Male (n=40)		Female (n=40)		<i>t</i> (78)	<i>p</i>	95% <i>CI</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>
CF	42.05	12.33	40.05	11.13	.76	.45	-3.23	7.23
PWB	24.13	3.99	24.25	4.46	-.13	.89	-2.01	1.76

Note: CF = Compassion Fatigue; PWB = Psychological Wellbeing; CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit

Table 4 mentions the results of independent sample t-testing which indicates that there are no significant differences between male ($M = 42.05$, $SD = 12.33$) and female ($M = 40.05$, $SD = 11.13$), $t(78) = .76$, $p > .05$, $d = .17$ on variable of compassion fatigue. Similarly the results show that on psychological wellbeing there are no significant differences between male ($M = 24.13$, $SD = 3.99$) and female ($M = 24.25$, $SD = 4.46$), $t(78) = -.13$, $p > .05$, $d = .03$.

Table 5*Multivariate multiple regression analysis predicting Compassion fatigue and Psychological wellbeing from Altruism (N=80)*

Effect	Test Statistic	Value	F	Hypothesis df	Error df	<i>p</i>	<i>Partial η²</i>
Multivariate Tests							
Altruism	Pillai`s Test	.37	22.34	2.00	77.00	.00	.37
	Wilk`s Lambda	.63	22.34	2.00	77.00	.00	.37
	Hotelling`s Trace	.58	22.34	2.00	77.00	.00	.37
	Roy`s Largest Root	.58	22.34	2.00	77.00	.00	.37
Univariate Tests							
Compassion Fatigue			10.22	1.00	78.00	.00	.12
Psychological Wellbeing			5.65	1.00	78.00	.02	.07

Table 5 findings tells us about how a multivariate multiple regression showed that altruism significantly predicted the combined dependent variables of compassion fatigue and psychological well-being, Pillai`s Trace = .37, $F(2, 77) = 22.34$, $p < .001$, partial $\eta^2 = .37$. Univariate analysis revealed that altruism positively predicted compassion fatigue, $F(1, 78) = 10.23$, $p =$

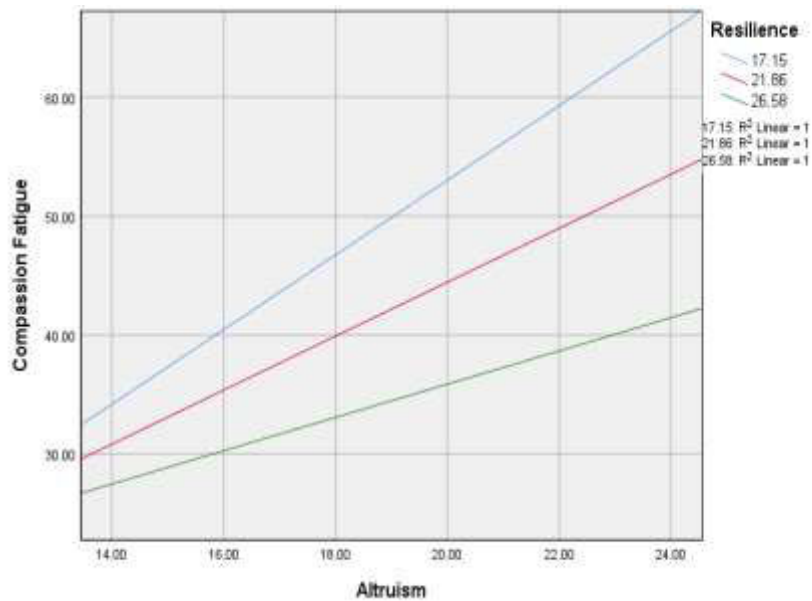
.00, partial $\eta^2 = .12$ (12 % variance), and psychological well-being, $F(1, 78) = 5.65$, $p = .02$, partial $\eta^2 = .07$ (7 % variance).

The findings indicate that although altruistic psychologists tend to experience higher well-being, their strong commitment to helping others may also increase their susceptibility to compassion fatigue.

Table 6*Moderating effect of resilience on altruism and compassion fatigue (N=80)*

Predictor	<i>B</i>	<i>SEB</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>
					<i>LL, UL</i>
Constant	-41.78	34.64	-1.21	.23	[-110.76, 27.21]
Resilience	1.87	1.47	1.27	.21	[-1.05, 4.79]
Altruism	6.30	1.91	3.30	.00	[2.49, 10.11]
Altruism*Resilience	-.18	.08	-2.32	.02	[-.34, -.03]
<i>R</i> ²	.46				
<i>F</i>	21.73***				

Note; (***) $p < .001$; *LL* = Lower Limit; *UL* = Upper Limit



A moderation analysis was performed using PROCESS SPSS macro to analyze the data (Hayes, 2002). Altogether 46% variability in compassion fatigue was predicted by all of the variables, $R^2 = .46$, $F(3, 76) = 21.73$, $p < .001$. Table 7 displays the

unstandardized regression coefficients. The interaction effect was statistically significant ($p = .02$) indicating that resilience moderated the effect of altruism on compassion fatigue. The moderating effect is shown in figure 1. The graph demonstrates that the relationship between altruism and compassion fatigue gets weaker in psychologists with high resilience and gets stronger in psychologists with low resilience.

Table 7*Moderating effect of resilience on altruism and psychological wellbeing (N=80)*

Predictor	<i>B</i>	<i>SEB</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>
					<i>LL, UL</i>
Constant	32.84	14.40	2.28	.25	[41.7, 61.50]
Resilience	-.40	.61	-.66	.51	[-1.61, .81]
Altruism	-1.00	.79	-1.26	.21	[-2.58, .58]
Altruism*Resilience	.04	.03	1.38	.17	[-.02, .11]
<i>R</i> ²		.28			
<i>F</i>		9.82***			

*Note: (***) $p < .001$; LL = Lower Limit; UL = Upper Limit*

A moderation analysis was performed using PROCESS SPSS macro to analyze the data (Hayes, 2002). Altogether 28% variability in psychological wellbeing was predicted by all of the variables, $R^2 = .28$, $F(3, 76) = 9.82$, $p < .001$. Table 8 displays the unstandardized regression coefficients. The interaction effect was not statistically significant ($p > .05$) indicating that resilience had no moderation effect on the relationship between altruism and psychological wellbeing.

DISCUSSION

The present study is directed towards understanding the relationship between altruism, compassion fatigue and psychological wellbeing among psychologists with moderating role of resilience. The first hypothesis of this research study is validated by the analysis of data whose results have shown a moderate positive correlation between altruism and compassion fatigue. The result is also supported by multiple previous studies which explored the role of altruism. A study by Amitha & Azhagannan (2024) conducted on the students of healthcare and social work exhibited the results that excess amount of pro social behavior can lead to a situation of vulnerability where individuals are prone to both burnout and compassion fatigue. Similarly another study highlighted the influence of altruism on organizational citizenship behavior where excess practice of altruism causes a decrease in personal accomplishment due to increase in burnout and emotional exhaustion (Emmerik et al., 2007).

Contrary to the initial part, the data analysis results do not indicate a negative correlation between altruism and psychological wellbeing but instead it showed a low positive correlation, Hence the findings were not according to our hypothesis. The results were in accordance with previous studies where altruistic attitudes, pro-social or informal helping behavior lead to positive impact on individual wellbeing as well as life satisfaction among old age participants (Kahana et al., 2013). Another study on adolescents in Korea lead to the result of emotional, cognitive empathy and altruistic behavior being responsible for the enhancement of psychological wellbeing. The curious

nature of adolescents is responsible for identification of different emotions and feelings in others leading to actions that in intended to help others (Han & Yoo, 2023).

Another part of hypothesis relates to the positive association of altruism with resilience and data analysis results completely support the hypothesis as its shows a moderate positive correlation. This is in accordance with a previous study conducted on caregivers of cancer patients where the higher scores on altruism scale lead to an increase in resilience score i-e they are positively correlated (Sen & Karadag, 2024). Shakibkhab et al. (2024) also carried out a research on the rescuers of the Red Crescent Society resulting in similar findings where a positive correlation was found to be existing between altruism, social support and resilience.

The second hypothesis of the study is assisted by the analysis of the data that altruism is a predictor of both compassion fatigue and psychological wellbeing. A study on the social workers in Korea yielded similar results where empathic concern which is an integral part of altruism was a predictor of burnout, compassion fatigue and secondary trauma stress (Yi et al., 2018). In a book by Oakley et al. (2012), it was structured and argued that a long term practice of altruism has negative impact and one of them is compassion fatigue hence it can be deemed as its predictor.

Similarly the analysis of data also affirms the hypothesis that altruism is a predictor of psychological wellbeing. A previous study by Rani & Kumar (2020) was conducted on university adolescents which resulted in findings showing that altruism and forgiveness as significant predictors of psychological wellbeing. The study focused on

increasing practice of forgiveness and altruistic attitudes for a healthier psychological wellbeing.

In addition, our study did not find any significant gender based difference in relation to compassion fatigue and psychological wellbeing which is in contradiction to our 3rd hypothesis. The data analysis results coincides with a previous study conducted on nursing staff which indicated that demographic factors like gender, age, qualification had no influence on the scoring of compassion fatigue, compassion satisfaction and burnout (Zang et al., 2018).

Similar to compassion fatigue, our data analysis score revealed non-existence of significant gender based difference for psychological wellbeing which is also in contradiction to our hypothesis. Ashok (2017) conducted a study on post graduate students which concluded that gender has absolutely no impact on individual psychological wellbeing or there is an absence of gender difference on psychological wellbeing.

Crucially the role of resilience as a moderator was found between the relationship of altruism and compassion fatigue which is in accordance with our fourth hypothesis. There is a lack of research studies relating to the moderating role of resilience between altruism and compassion fatigue but many studies can be found identifying resilience as a moderator. Work by Rauf and Saba (2024) concluded resilience as a significant moderator for the relationship of compassion fatigue and quality of life among health professionals.

Furthermore the data analysis results indicate that resilience had no moderating effect on the relationship between altruism and psychological wellbeing which is inconsistent with our hypothesis. Direct studies inspecting the impact of resilience between the relationship of altruism and psychological wellbeing were not found but some previous research work were identified where resilience did not act as a moderator. Akanni et al. (2023) studied the moderating role of resilience among health care workers during covid-19 and found that at low levels of resilience the mental wellbeing was established to be high suggesting that resilience has no moderating role between compassion fatigue and mental wellbeing. In a subsequent research it was identified that psychological resilience did not play any moderating role between occupational stress and mental health (Chen et al., 2022)

Limitations and Suggestions

Following are the limitations in this study:

1. Due to the presence of logistical issues, time constraints and difficulty in funds availability, it was decided to focus only on one kind of sample participants i.e psychologists
2. The focus of the study is only on psychologists which will clearly impact the diversity of the sample which in turn will lead to findings which can't be generalized.
3. The use of purposive sampling may invoke some choices with biases as all the selection is based on subjectivity

4. Absence of randomized sample will have an impact on the reliability of the results especially when the participants to be included in the study are restricted to only specific cities.
5. Since correlational, cross sectional survey design is being used, caution must be practiced in interpretation of the results as this design cannot determine cause and effect relationship between different variables.
6. Ruling out the use of qualitative methods may limit the different and deeper avenues of understanding how compassion fatigue and psychological wellbeing impacts psychologists and how they cope with the situation.
7. Reliance on self-reporting questionnaires can impact results as it can introduce potential different biases and the possibility of downplaying or underreporting adverse or negative symptoms.

Following are the suggestions for this study

1. Using a different research design like longitudinal design to examine how altruism impacts compassion fatigue and psychological wellbeing and how it all changes over time. Focus on the possibility of establishing causation relationships.
2. Focus on an intervention based research studies. Incorporate coping techniques and strategies for reduction in compassion fatigue along with introduction of resilience training and examine their impact on psychological wellbeing
3. Expand sample size as well as including psychologists from different parts or regions of Pakistan

4. Opt for combining both quantitative as well as qualitative methods for a much better and deeper understanding of variables and their impact
5. Explore possibility of using different mediators and moderators

Implications

Following are the possible implications of this study:

1. As we have found out as a result of this research work that altruism is positively correlated with compassion fatigue, it opens up a possible avenue for different institutions or workplaces to focus more on balanced altruistic approach or engagement along with different self-care techniques or strategies making sure that psychologists don't compromise their mental health while providing meaningful contribution
2. Since resilience is identified as a moderator, institutions and organizations should focus on different resilience building interventions or strategies to enhance the ability of an individual to perform better and to reduce compassion fatigue specially for highly altruistic professionals
3. A multifaceted approach should be employed to enhance psychological wellbeing like social support, better working conditions, job security and autonomy etc as resilience alone will not be helpful for a better psychological wellbeing
4. There should be a routine check or monitoring of compassion fatigue and psychological wellbeing for those involved in clinical practice along with creating a culture at institutes that promote self-compassion and values sustainable altruism.

5. In terms of pure research, the study provides an understanding on how a positive trait like altruism can have both positive as well as negative implications especially in health care profession.

Conclusion

This research study explored the intricate association between altruism, compassion fatigue, psychological wellbeing among psychologists along with the role of resilience as a moderator. Multiple set of findings revealed that altruism was positively correlated with compassion fatigue, psychological wellbeing and resilience. This indicates that though practice of altruism or altruistic behavior can lead to a sense of achievement, contentment or gratification, it can also be a cause of emotional discomfort leading to exhaustion, numbness or compassion fatigue. Crucially resilience was found to act as a moderator which helps in decreasing the negative impact of altruism on compassion fatigue. However, it was found that resilience did not act as moderator for the relationship of altruism and psychological wellbeing showing that psychological wellbeing is not just influenced by resilience alone but other social, personal or different environmental factors are involved. Apart from that, no significant gender differences existed pertaining to compassion fatigue and psychological wellbeing.

The study is very helpful in understanding the role of altruism among health care professionals particularly psychologists along with the need of different institutions, organizations to create a healthy working environment which helps in fostering psychological wellbeing leading them to perform their services with utmost dedication and professionalism.

REFERENCES

- Akanni, A. A., Ajele, K. W., & Oduaran, C. A. (2023). Moderating effect of resilience in the relationship between compassion fatigue and mental well-being among frontline health workers exposed to COVID-19 Patients. *Romanian Journal of Applied Psychology*, 25(1-2), 9–13.
- Amitha, T. K., & Azhagannan, K. (2024). The Altruistic Personality: Exploring its Influence on Prosocial Behavior, and Compassion Fatigue among Students of Healthcare and Social Work. *Indian Journal of Positive Psychology*, 15(4), 395
- Arshad, S. a. T., & Kausar, R. (2015). Psychological correlates of distress in rescue 1122 workers in Pakistan. *International Journal of Emergency Mental Health and Human Resilience*, s2. <https://doi.org/10.4172/1522-4821.1000201>
- Ashok, K. S. (2017). Impact of gender on psychological well-being among post-graduate students. *Psychology and Behavioral Science International Journal*, 2(1), 555578. <https://doi.org/10.19080/PBSIJ.2016.02.555578>
- Austin, W., Goble, E., Leier, B., & Byrne, P. (2009). Compassion fatigue: the experience of nurses. *Ethics and Social Welfare*, 3(2), 195–214. <https://doi.org/10.1080/17496530902951988>
- Batson, C. D. (2017b). The Empathy-Altruism hypothesis. In *Oxford University Press eBooks*. <https://doi.org/10.1093/oxfordhb/9780190464684.013.3>

- Bloch-Jorgensen, Z. T., Cilione, P. J., Yeung, W. W. H., & Gatt, J. M. (2018b). Centeredness Theory: Understanding and Measuring Well-Being across core Life domains. *Frontiers in Psychology, 9*. <https://doi.org/10.3389/fpsyg.2018.00610>
- Cathomas, F., Murrough, J. W., Nestler, E. J., Han, M., & Russo, S. J. (2019). Neurobiology of Resilience: Interface between mind and body. *Biological Psychiatry, 86*(6), 410–420. <https://doi.org/10.1016/j.biopsych.2019.04.011>
- Chen, S., Yan, S., Zhao, W., Gao, Y., Zong, W., Bian, C., Cheng, Y., & Zhang, Y. (2022). The mediating and moderating role of psychological resilience between occupational stress and mental health of psychiatric nurses: a multicenter cross-sectional study. *BMC Psychiatry, 22*(1). <https://doi.org/10.1186/s12888-022-04485-y>
- Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene, P. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology, 74*(6), 1516–1530. <https://doi.org/10.1037/0022-3514.74.6.1516>
- Coetzee, S. K., & Laschinger, H. K. S. (2017). Toward a comprehensive, theoretical model of compassion fatigue: An integrative literature review. *Nursing & Health Sciences, 20*(1), 4–15. <https://doi.org/10.1111/nhs.12387>
- Dambrun, M., & Ricard, M. (2011). Self-Centeredness and Selflessness: A theory of Self-Based Psychological functioning and its consequences for happiness. *Review of General Psychology, 15*(2), 138–157. <https://doi.org/10.1037/a0023059>

- Davidson, R. J. (2000b). Affective style, psychopathology, and resilience: Brain mechanisms and plasticity. *American Psychologist*, 55(11), 1196–1214. <https://doi.org/10.1037/0003-066x.55.11.1196>
- Davis, M. H. (1983). The effects of dispositional empathy on emotional reactions and helping: A multidimensional approach. *Journal of Personality*, 51(2), 167–184. <https://doi.org/10.1111/j.1467-6494.1983.tb00860.x>
- De Waal, F. B. M. (2008). Putting the Altruism Back into Altruism: The Evolution of Empathy. *Annual Review of Psychology*, 59(1), 279–300. <https://doi.org/10.1146/annurev.psych.59.103006.093625>
- Fehr, E., & Fischbacher, U. (2003). The nature of human altruism. *Nature*, 425(6960), 785–791. <https://doi.org/10.1038/nature02043>
- Feng, Y., Zong, M., Yang, Z., Gu, W., Dong, D., & Qiao, Z. (2020). When altruists cannot help: the influence of altruism on the mental health of university students during the COVID-19 pandemic. *Globalization and Health*, 16(1). <https://doi.org/10.1186/s12992-020-00587-y>
- Figley, C. R. (2002). Compassion fatigue: Psychotherapists' chronic lack of self care. *Journal of Clinical Psychology*, 58(11), 1433–1441. <https://doi.org/10.1002/jclp.10090>
- Filkowski, M. M., Cochran, R. N., & Haas, B. W. (2016). Altruistic behavior: mapping responses in the brain. *Neuroscience and Neuroeconomics, Volume 5*, 65–75. <https://doi.org/10.2147/nan.s87718>

- Gicheva, D. (2020). Altruism and burnout: long hours in the teaching profession. *ILR Review*, 75(2), 427–457. <https://doi.org/10.1177/0019793920981055>
- Giovanis, E., & Özdamar, Ö. (2020). Who is Left Behind? Altruism of Giving, Happiness and Mental Health during the Covid-19 Period in the UK. *Applied Research in Quality of Life*, 17(1), 251–276. <https://doi.org/10.1007/s11482-020-09900-8>
- Goldstein, S., & Brooks, R. B. (2012). Why study resilience? In *Springer eBooks* (pp. 3–14). https://doi.org/10.1007/978-1-4614-3661-4_1
- Gunderson, L. (2000). Ecological Resilience—In theory and application. *Annual Review of Ecology and Systematics*, 31(1), 425–439. <https://doi.org/10.1146/annurev.ecolsys.31.1.425>
- Han, S., & Yoo, D. (2024). Effect of adolescents’ cognitive and emotional empathy and altruistic behavior on psychological well-being. *Korean Journal of Child Studies*, 45(1), 1–13. <https://doi.org/10.5723/kjcs.2024.45.1.1>
- Haski-Leventhal, D. (2009). Altruism and Volunteerism: The perceptions of altruism in four disciplines and their impact on the study of volunteerism. *Journal for the Theory of Social Behaviour*, 39(3), 271–299. <https://doi.org/10.1111/j.1468-5914.2009.00405.x>
- Herrman, H., Stewart, D. E., Diaz-Granados, N., Berger, E. L., Jackson, B., & Yuen, T. (2011). What is Resilience? *The Canadian Journal of Psychiatry*, 56(5), 258–265. <https://doi.org/10.1177/070674371105600504>

- Hoffman, M. L. (1981). Is altruism part of human nature? *Journal of Personality and Social Psychology*, *40*(1), 121–137. <https://doi.org/10.1037/0022-3514.40.1.121>
- Home, J. F., & Orr, J. E. (1997). Assessing behaviors that create resilient organizations. *Employment Relations Today*, *24*(4), 29–39. <https://doi.org/10.1002/ert.3910240405>
- Honor, G. (2017). Resilience. *Journal of Pediatric Health Care*, *31*(3), 384–390. <https://doi.org/10.1016/j.pedhc.2016.09.005>
- Huppert, F. A. (2009). Psychological Well-being: Evidence Regarding its Causes and Consequences†. *Applied Psychology: Health and Well-Being*, *1*(2), 137–164. <https://doi.org/10.1111/j.1758-0854.2009.01008.x>
- Ikram, A., Lashari, S. A., & Lashari, T. A. (2023). Professional quality of life, empathy, and coping strategies of young clinical psychologists in Lahore, Pakistan. *Iranian Journal of Psychiatry and Clinical Psychology*, *29*(2), 216–235. <https://doi.org/10.32598/ijpcp.29.2.4594.1>
- Ishfaq, A., & Gholami, A. (2023). Impact of altruism, heroism, and psychological distress on quality of life among social workers during COVID-19. *Pakistan Journal of Psychological Research*, *38*(2), 329–347. <https://doi.org/10.33824/pjpr.2023.38.2.20>
- Izquierdo, M. G., De Pedro, M. M., Ríos-Risquez, M. I., & Sánchez, M. I. S. (2017b). Resilience as a moderator of psychological health in situations of chronic stress

- (Burnout) in a sample of hospital nurses. *Journal of Nursing Scholarship*, 50(2), 228–236. <https://doi.org/10.1111/jnu.12367>
- Kahana, E., Bhatta, T., Lovegreen, L. D., Kahana, B., & Midlarsky, E. (2013). Altruism, helping, and volunteering. *Journal of Aging and Health*, 25(1), 159–187. <https://doi.org/10.1177/0898264312469665>
- Kaplan, H. B. (2007). Understanding the concept of resilience. *In Springer eBooks* (pp. 39–47). https://doi.org/10.1007/0-306-48572-9_3
- Kerr, B., Godfrey-Smith, P., & Feldman, M. W. (2004). What is altruism? *Trends in Ecology and Evolution*, 19(3), 135–140. <https://doi.org/10.1016/j.tree.2003.10.004>
- Khalil, E. L. (2001). Adam Smith and Three Theories of Altruism. *Recherches Économiques De Louvain*, 67(4), 421. <https://doi.org/10.3917/rel.674.0421>
- Khalil, E. L. (2004). What is altruism? *Journal of Economic Psychology*, 25(1), 97–123. [https://doi.org/10.1016/s0167-4870\(03\)00075-8](https://doi.org/10.1016/s0167-4870(03)00075-8)
- King, M. L. (2019). The neural correlates of well-being: A systematic review of the human neuroimaging and neuropsychological literature. *Cognitive, Affective, & Behavioral Neuroscience*, 19(4), 779–796. <https://doi.org/10.3758/s13415-019-00720-4>
- Krebs, D. L. (1970). Altruism: An examination of the concept and a review of the literature. *Psychological Bulletin*, 73(4), 258–302. <https://doi.org/10.1037/h0028987>

- Kumar, S., & Kashyap, S. P. (2014). Role of resilience as a moderator between the relationship of occupational stress and psychological health. *Indian journal of health and wellbeing, and Wellbeing*, 5(9), 1023-1026
- Labrague, L. J., & De Los Santos, J. a. A. (2021). Resilience as a mediator between compassion fatigue, nurses' work outcomes, and quality of care during the COVID-19 pandemic. *Applied Nursing Research*, 61, 151476. <https://doi.org/10.1016/j.apnr.2021.151476>
- Lakshmi, K. (2013). Altruism and dāna: impact on self and well-being. *Journal of Human Values*, 19(1), 65–71. <https://doi.org/10.1177/0971685812470338>
- Longo, Y., Coyne, I., & Joseph, S. (2017). The scales of general well-being (SGWB). *Personality and Individual Differences*, 109, 148–159. <https://doi.org/10.1016/j.paid.2017.01.005>
- Mallak, L. A. (1998). Measuring resilience in health care provider organizations. *Health Manpower Management*, 24(4), 148–152. <https://doi.org/10.1108/09552069810215755>
- Manyena, B. (2006). The concept of resilience revisited. *Disasters*, 30(4), 434–450. <https://doi.org/10.1111/j.0361-3666.2006.00331.x>
- Massey, E. K., Kranenburg, L. W., Zuidema, W., Hak, G., Erdman, R. A., Hilhorst, M., IJzermans, J. N., Busschbach, J. J. V., & Weimar, W. (2010). Encouraging psychological outcomes after altruistic donation to a stranger. *American Journal*

of *Transplantation*, 10(6), 1445–1452. <https://doi.org/10.1111/j.1600-6143.2010.03115.x>

Mokhtar, M. Y. O., Arifain, S. M. K., Isa, M. F. M., Jailani, A., & Othman, W. N. W. (2020). The Concept of Altruism and Ihsan as an Approach towards Achieving Psychological Well-Being at The Workplace: An Observation at The Islamic University College of Melaka. *International Journal of Academic Research in Business & Social Sciences*, 10(10). <https://doi.org/10.6007/ijarbss/v10-i10/7997>

Mottaghi, S., Poursheikhali, H., & Shameli, L. (2019). Empathy, compassion fatigue, guilt and secondary traumatic stress in nurses. *Nursing Ethics*, 27(2), 494–504. <https://doi.org/10.1177/0969733019851548>

Msw, J. Y., Msw, M. a. K., Msw, K. C., Droubay, B. A., & Msw, S. K. (2019). Compassion satisfaction and compassion fatigue among medical social workers in Korea: the role of empathy. *Social Work in Health Care*, 58(10), 970–987. <https://doi.org/10.1080/00981389.2019.1686678>

Nathan, L. (2015). Altruism: A Pathway for Psychological Well-Being. *Indian Journal of Positive Psychology*, 6(1), 90-92

Oakley, B., Knafo, A., Madhavan, G., & Wilson, D. S. (Eds.). (2012). *Pathological altruism*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199738571.001.0001>

- Papazoglou, K., Koskelainen, M., & Stuewe, N. (2019). Examining the relationship between personality traits, compassion satisfaction, and compassion fatigue among police officers. *SAGE Open*, 9(1), 215824401882519. <https://doi.org/10.1177/2158244018825190>
- Piliavin, J. A., & Charng, H. (1990). Altruism: A review of recent theory and research. *Annual Review of Sociology*, 16(1), 27–65. <https://doi.org/10.1146/annurev.so.16.080190.000331>
- Potter, P., Deshields, T. L., Divanbeigi, J., Berger, J., Cipriano, D., Norris, L., & Olsen, S. (2010). Compassion fatigue and burnout. *Clinical Journal of Oncology Nursing*, 14(5), E56–E62. <https://doi.org/10.1188/10.cjon.e56-e62>
- Rani, R., & Kumar, K. (2020). Forgiveness and altruism as predictors of psychological well-being among adolescents. *International Journal of Psychosocial Rehabilitation*, 24(4), 1947–1954. <https://doi.org/10.37200/IJPR/V24I4/PR201563>
- Rsw, A. R. B. M. (2018), *Compassion fatigue and the reactive brain*. <https://www.linkedin.com/pulse/compassion-fatigue-reactive-brain-amanda-rocheleau>
- Rolf, J. E., & Glantz, M. D. (2002). Resilience. In *Springer eBooks* (pp. 5–14). https://doi.org/10.1007/0-306-47167-1_2

- Russo, S. J., Murrrough, J. W., Han, M., Charney, D. S., & Nestler, E. J. (2012). Neurobiology of resilience. *Nature Neuroscience*, 15(11), 1475–1484. <https://doi.org/10.1038/nn.3234>
- Rutter, M. (2012). Resilience as a dynamic concept. *Development and Psychopathology*, 24(2), 335–344. <https://doi.org/10.1017/s0954579412000028>
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081. <https://doi.org/10.1037/0022-3514.57.6.1069>
- Ryff, C. D., & Singer, B. H. (1996). Psychological Well-Being: Meaning, measurement, and implications for psychotherapy research. *Psychotherapy and Psychosomatics*, 65(1), 14–23. <https://doi.org/10.1159/000289026>
- Ryff, C. D., & Singer, B. H. (2006). Know thyself and become what you are: A eudaimonic approach to Psychological Well-Being. *Journal of Happiness Studies*, 9(1), 13–39. <https://doi.org/10.1007/s10902-006-9019-0>
- Rauf, S., & Saba, F. (2024). Compassion fatigue and professional quality of life among health professionals: Moderating role of professional resilience. *Wah Academia Journal of Social Sciences*, 2(1), 60–72. <https://doi.org/10.5281/zenodo.10859360>
- Schwartz, P. (2015). The Ayn Rand Institute eStore. (n.d.). *In Defense of Selfishness: Why the Code of Self-Sacrifice is unjust and destructive*.

- S, K. A. (2017). Impact of Gender on Psychological Well-Being among Post-Graduate Students. *Psychology and Behavioral Science International Journal*, 2(1). <https://doi.org/10.19080/pbsij.2017.02.555578>
- Seligman, M. (2018). PERMA and the building blocks of well-being. *The Journal of Positive Psychology*, 13(4), 333–335. <https://doi.org/10.1080/17439760.2018.1437466>
- Şen, A. Ö., & Karadağ, E. (2023). The effect of altruistic behaviors on psychological resilience and care burden in caregivers. *Akdeniz Medical Journal*. <https://doi.org/10.53394/akd.1116494>
- Shakibkhah I, Rafiei M, Moradian MJ, Ahmadi Marzaleh M, Haydari M, Pirae E. Investigating the Relationship Between Altruism and Social Support With the Resilience of Rescuers. *Health in Emergencies and Disasters Quarterly*. 2025; 10(3):177- 184. <http://dx.doi.org/10.32598/hdq.10.3.190.17>
- Sinclair, S., Raffin-Bouchal, S., Venturato, L., Mijovic-Kondejewski, J., & Smith-MacDonald, L. (2017). Compassion fatigue: A meta-narrative review of the healthcare literature. *International Journal of Nursing Studies*, 69, 9–24. <https://doi.org/10.1016/j.ijnurstu.2017.01.003>
- Sorenson, C., Bolick, B. N., Wright, K., & Hamilton, R. (2016). Understanding compassion fatigue in healthcare Providers: A review of Current literature. *Journal of Nursing Scholarship*, 48(5), 456–465. <https://doi.org/10.1111/jnu.12229>

- Southwick, S. M., Bonanno, G. A., Masten, A. S., Panter-Brick, C., & Yehuda, R. (2014). Resilience definitions, theory, and challenges: interdisciplinary perspectives. *European Journal of Psychotraumatology*, 5(1). <https://doi.org/10.3402/ejpt.v5.25338>
- Stoewen, D. L. (2019, September 1). *Moving from compassion fatigue to compassion resilience* <https://pmc.ncbi.nlm.nih.gov/articles/PMC6697064/>
- Tashjian, S. M., Rahal, D., Karan, M., Eisenberger, N. I., Galván, A., Cole, S. W., & Fuligni, A. J. (2020). Evidence from a Randomized Controlled Trial that Altruism Moderates the Effect of Prosocial Acts on Adolescent Well-being. *Journal of Youth and Adolescence*, 50(1), 29–43. <https://doi.org/10.1007/s10964-020-01362-3>
- Thomas, J. T. (2013). Association of personal distress with burnout, compassion fatigue, and compassion satisfaction among clinical social workers. *Journal of Social Service Research*, 39(3), 365–379. <https://doi.org/10.1080/01488376.2013.771596>
- Trettenbrein, P. C. (2015). Neuroscience and human nature: Review of The Altruistic Brain. *Frontiers in Psychology*, 6. <https://doi.org/10.3389/fpsyg.2015.00307>
- Valent, P. (1995). *Survival strategies: A framework for understanding secondary traumatic stress and coping in helpers*

- Van Emmerik, I. H., Jawahar, I. M., & Stone, T. H. (2005). Associations among altruism, burnout dimensions, and organizational citizenship behaviour. *Work & Stress, 19*(1), 93–100. <https://doi.org/10.1080/02678370500046283>
- Warneken, F., & Tomasello, M. (2009). The roots of human altruism. *British Journal of Psychology, 100*(3), 455–471. <https://doi.org/10.1348/000712608x379061>
- Warr, P. (1978). A study of psychological well-being. *British Journal of Psychology, 69*(1), 111–121. <https://doi.org/10.1111/j.2044-8295.1978.tb01638.x>
- Weng, H. Y., Fox, A. S., Shackman, A. J., Stodola, D. E., Caldwell, J., Olson, M. C., Rogers, G. M., & Davidson, R. J. (2013). Compassion training alters altruism and neural responses to suffering. *Psychological Science, 24*(7), 1171–1180. <https://doi.org/10.1177/0956797612469537>
- Werner, E. E. (1995). Resilience in development. *Current Directions in Psychological Science, 4*(3), 81–84. <https://doi.org/10.1111/1467-8721.ep10772327>
- Winefield, H. R., Gill, T. K., Taylor, A., & Pilkington, R. (2012). Psychological well-being and psychological distress: is it necessary to measure both? *Psychology of Well-being, 2*(1), 3. <https://doi.org/10.1186/2211-1522-2-3>
- Wu, G., eFeder, A., eCohen, H., Kim, J. J., eCalderon, S., Charney, D. S., & Mathé, A. A. (2013). Understanding resilience. *Frontiers in Behavioral Neuroscience, 7*. <https://doi.org/10.3389/fnbeh.2013.00010>

- Xi, J., Lee, M., Lesuer, W. M., Barr, P. B., Newton, K., & Poloma, M. M. (2016). Altruism and existential Well-Being. *Applied Research in Quality of Life*, 12(1), 67–88. <https://doi.org/10.1007/s11482-016-9453-z>
- Yi, J., Kim, M. A., Choi, K., Droubay, B. A., & Kim, S. (2019). Compassion satisfaction and compassion fatigue among medical social workers in Korea: the role of empathy. *Social Work in Health Care*, 58(10), 970–987. <https://doi.org/10.1080/00981389.2019.1686678>
- Zhang, Y., Han, W., Wen, Q., Yin, H., Zhang, C., Chen, K., & Wang, Y. (2018). Extent of compassion satisfaction, compassion fatigue and burnout in nursing: A meta-analysis. *Journal of Nursing Management*, 26(7), 810–819. <https://doi.org/10.1111/jonm.12589>
- Zhang, Y., Zhang, C., Han, X., Li, W., & Wang, Y. (2018). Determinants of compassion satisfaction, compassion fatigue and burn out in nursing. *Medicine*, 97(26), e11086. <https://doi.org/10.1097/md.00000000000011086>

APPENDICES

Annexure A: Informed Consent

You are invited to participate in a research study "relationship between altruism, compassion fatigue and psychological wellbeing among psychologists: moderating role of resilience ". This study is being conducted by Affan Dawood Ahmed, MS Scholar, Department of Psychology, International Islamic University, Islamabad.

Your participation involves completing a questionnaire assessing these factors. Participation is voluntary, and you can withdraw at any time . All information will be kept confidential and used solely for research purposes. Your responses are anonymous.

Some questions might cause mild distress; you can choose not to answer or withdraw if uncomfortable. Your contribution will help advance understanding of mental health factors among psychologists.

By completing the questionnaire, you indicate informed consent. If you have any queries or concerns, please feel free to contact me at affan.mscp513@student.iiu.edu.pk.

Signature _____

Annexure B: Demographic Sheet

Age					
Gender	1) Male		2) Female		
Marital Status	1) Single		2) Married		
Educational Background	1) MS	2) PhD		3) Diploma Holder	
Socioeconomic Status	1) Upper Class	2) Middle Class		3) Lower Class	
Cultural Background	1) Punjab	2) Sindh	3) Pushtoon	4) Baloch	5) Federal
Family Structure	1) Joint		2) Nuclear		
Working Experience (Years)					
Work Setting	1)Autism Center	2)Addiction Center	3)Hospital (psychiatric Ward)	4) Private Clinic	

Annexure C: Generative Altruism Scale

Please reach each statement carefully and indicate how much it relates to you. There is no right and wrong answer. Select the option that is most correct for you in the current situation

Statements	Never	Sometimes	Often	Very Often
In my spare time I work voluntarily for others	0	1	2	3
I don't money for charity	0	1	2	3
When I see needy people, I ask them how I can help them	0	1	2	3
When I see needy people, I give them money	0	1	2	3
When I see needy people, I think about how to relieve their misery or meet their needs	0	1	2	3
If someone who I do not know asks me for help, I will immediately help them	0	1	2	3
If someone who I do not know intends to borrow something which is important to me, I will lend to them	0	1	2	3
I lend (money, possessions) even to those who are not in my immediate circle	0	1	2	3
I help others even when there is no direct benefit to me	0	1	2	3
I relinquish my materials in favor of common good	0	1	2	3

When I see suffering I try to find ways to reduce it	0	1	2	3
--	---	---	---	---

Annexure D: Compassion Fatigue Inventory

Indicate how much you agree or disagree with the following statements by selecting the answer that best represents your feelings

(1) Does not fit at all (2) Fits poorly (3) Fits partially (4) Fits fairly well (5) Fits perfectly

My will to help has declined	1	2	3	4	5
I have started to judge my patients in a way I would not want to.	1	2	3	4	5
I have started to feel a growing reluctance towards seeing my patients	1	2	3	4	5
I find it more difficult to respond to demanding patients in the way I would want to	1	2	3	4	5
I feel irritated when patients complain	1	2	3	4	5
It is becoming increasingly harder for me to handle the complexity of clients with comorbidity.	1	2	3	4	5
I have noticed that I distance myself from other peoples' pain more often than before.	1	2	3	4	5
My work bores me more often than before.	1	2	3	4	5
I have noticed that I try to stay engaged with my patients even though I do not have the energy for it.	1	2	3	4	5
I have noticed that my patience in my personal relationships has dwindled.	1	2	3	4	5
I have started to withdraw from social interaction	1	2	3	4	5
I feel that I do not have the same energy to engage in the problems of my	1	2	3	4	5

close ones.					
I have started to avoid spare time activities that are intellectually challenging	1	2	3	4	5
I feel that my workplace provides care that is in accordance with my values	1	2	3	4	5
I have enough resources at my workplace to provide my patients with the type of care they need	1	2	3	4	5
I feel that there are clear rules and regulations for how I should work	1	2	3	4	5

Annexure E: Short Warwick-Edinburgh Mental Wellbeing Scale

Following statements represent feeling and thoughts. Check the option that is the best response for you with your experience in the last 2 weeks. There is no right or wrong answers.

Statements	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5

Annexure F: Brief Resilience Scale

Please respond to the following statements truthfully and accurately as you can. There are no right or wrong answers. Your opinion is important

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I tend to bounce back quickly after hard times	1	2	3	4	5
* I have a hard time making it through stressful events.	5	4	3	2	1
It does not take me long to recover from a stressful event	1	2	3	4	5
*It is hard for me to snap back when something bad happens	5	4	3	2	1
I usually come through difficult times with little trouble	1	2	3	4	5
*I tend to take a long time to get over set-backs in my life	5	4	3	2	1