

## **Self-Compassion and Positive Psychological Functioning in Women with Primary and Secondary Infertility**

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The present paper investigated relationship between self-compassion and positive psychological functioning, i.e., hope, gratitude and psychological well-being, in women with primary and secondary infertility. It was hypothesized that there is likely to be a relationship in self-compassion and positive psychological functioning in women with infertility; self-compassion, hope and gratitude are likely to predict psychological well-being of women with infertility; and there is likely to be difference in self-compassion and positive psychological functioning in women with primary and secondary infertility. A sample of 60 women with infertility (n=30 with primary infertility; n=30 with secondary infertility) was taken from Hameed Latif Hospital and Tariq Clinic, Lahore, Pakistan. For assessment Self-Compassion Scale by Neff (2003a), Hope Trait Scale by Snyder, Irving, and Anderson (1991), Gratitude Scale by McCullough, Emmons, and Tsang (2002) and Psychological Well Being Scale by Ryff (1989) were used. Pearson Product Moment Correlation, Hierarchical Regression and Independent Sample t test were applied. Results indicated a significant relationship of self-compassion with psychological well-being of women. Results showed that self-compassion (isolation and mindfulness) predicted psychological well-being (personal growth) after controlling the effects of demographic characteristics. Moreover, women with secondary infertility were more self-compassionate (over identification) and had better psychological well-being (environmental mastery) as compared to women with primary infertility. Findings have important implications for infertile women to enhance their psychological well-being by highlighting the importance of positive thinking.

*Keywords:* Self-compassion, hope, gratitude, psychological well-being, infertility.

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Infertility is an inability of a female to turn pregnant after a time period of 12 months of unprotected intercourse (Cwikel, Gidron, & Sheiner, 2004). Medical definition of infertility also encapsulates the inability to carry through a pregnancy to its natural conclusion resulting in miscarriages (Simons, 1998). Primary infertility implies the inability to conceive after 12 months of unprotected intercourse. Secondary infertility refers to the inability to conceive having previously experienced a successful pregnancy (Simons, 1998).

In Pakistan, 32% of women are diagnosed with primary infertility and 68% of infertile women are diagnosed as experiencing secondary infertility (World Health Organization [WHO], 2008). In Pakistan, when a married woman becomes pregnant, her pregnancy is regarded as a beginning of a new generation, pregnancy increases the worth of a married woman in her family and in front of her husband (Khalid, 1996). Six million people are married, in which 80 lack are infertile due to one or multiple reasons in Pakistan. In every seven couple, one is infertile. It is very surprising that in Pakistan, the ratio of infertility is more in males as compared to females, but it is a trend in Pakistan that male members do not visit doctors for diagnosis and treatment and blame is always given to the female (The Nation newspaper, 2013).

Infertility causes a lot of psychological problems in women and couples experience a chain of emotional problems after the diagnosis of infertility, but the role of social support from family is very important. It is also a fact that if a female has courage to face the situation she can handle her infertility in positive ways. If a female is self-compassionate than her psychological functioning will be positive and she shows hope for the future that leads to gratitude and psychological well-being (Burns & Covington, 2001).

Self-compassion denotes being caring and compassionate towards oneself in the difficult and distressing times or being hopeful when a person feels that things are inadequate for him (Snyder & Lopez, 2007). Self-compassion involves an empathic and compassionate attitude towards oneself. Self-compassion comprises of three main components: self-kindness versus self-judgment and

common humanity (Neff, 2003b). Self-compassion is related to positive psychological functioning.

Positive psychological functioning helps the women to motivate their lives and move forward towards attaining stability. Positive psychological functioning is defined as being hopeful, thankful and psychologically well in life. Hope is defined as the goal directing thinking in which the individual utilizes new path ways, positive thinking and practical action to handle situations (Snyder & Lopez, 2007). Gratitude, thankfulness, gratefulness, or positive reception is a feeling in acknowledgment of a benefit that one has well-known (Watkins, Scheer, Ovnicek, & Kolts, 2006). Diener (2000) defines well-being as a combination of positive effects and general life satisfaction. Furthermore, he uses the term subjective well-being as the synonym of happiness.

Ample evidence showed that self-compassion and positive ways of handling situation increase positive psychological functioning in infertile women (Bodgan, 2010; Lalos, Jacobson & Schultz, 2005; Hirsch & Hirsch, 1995; Lu, Yang, & Lu, 1995; William, 1997). Literature also suggests that women with primary infertility experience more distress, are less compassionate and have poor psychological functioning as compared to women with secondary infertility (Kausar & Amjad 1992; Malik & Kausar, 2000; Epstein & Rosenberg, 2005).

### **Rationale of the Research**

Infertility has a detrimental impact on the lives of couples (Khalid, 1996; Simons, 1998). Few studies that have demarcated primary or secondary infertility report that women with primary infertility experience higher rates of depression and lower levels of hope and well-being rather than those who have one or more baby before infertility (Epstein & Rosenberg, 2005; McQuillan, Stone, & Greil, 2007). Self-compassion and positive psychological functioning also play important role in the lives of infertile women. Women with positive attitude can handle the every state of life. In Pakistan, becoming pregnant and giving birth to a child is linked

with a status of women. The present research will investigate that how self-compassion leads towards positive psychological functioning..

The objective of the present research was to assess the role of positive psychological attributes like self-compassion for positive and healthy functioning in women with infertility. It also aimed to investigate differences in self-compassion and positive psychological functioning in women with primary and secondary infertility.

### **Hypotheses**

H1. There is likely to be a relationship between self-compassion and positive psychological functioning in women with infertility.

H2. Self-compassion, hope and gratitude are likely to predict psychological well-being in women with infertility.

H3. There is likely to be a difference in self-compassion and positive psychological functioning in women with primary and secondary infertility.

### **Method**

#### **Participants**

The sample comprised of 60 women with infertility (n=30 women with primary infertility n= 30 women with secondary infertility) recruited from two private hospitals in Lahore, Pakistan. Purposive sampling strategy was used to select the sample. They ranged in ages between 25 to 40 years and this age range was considered due to the reason that during this age, there is less likelihood of have serious health related problems (Bodgan, 2010) and only those women were included who were consulting medical professionals for seeking treatment for infertility.

## Measures

Neff Self-Compassion Scale (SCS, Neff, 2003a), Hope Scale (Snyder, Irving, & Anderson, 1991), and Gratitude Questionnaire (GQ, McCullough, Emmons, & Tsang, 2002) were translated in Pakistani national language, Urdu. The procedure for translation of the scales was according to the procedure described in Linguistic Validation Methodology by MAPI institute (2008). The steps of translation according to MAPI were conceptual definition, forward translation, backward translation, pilot testing and proof reading. Description of the scales is given below.

**Neff Self-Compassion Scale (SCS, Neff, 2003).** The self-compassion scale is a 26 item scale designed to measure self-kindness, self-judgment, mind-fullness, isolation, common humanity, and over identification. For each item one is required to report the extent they had experienced each state (during the period of infertility) by rating on a 5-point Likert scale (1= strongly disagree to 5= strongly agree). The higher score on scale shows higher level of self-compassion. The reliability of SCS for the present study sample was .79 for the total scale and for subscales: self-kindness, self-judgment, common humanity, isolation, mindfulness, over-identification it was .65, .74, .76, .89, .75 and .88 respectively.

**Hope Scale (Snyder, Irving, & Anderson, 1991).** The hope scale is a 12 item scale with three subscales agency, pathways and fillers. Each subscale consists of 4 items each which are rated on 8-point likertype scale, with responses ranging from definitely false to definitely true. The total scores can range from a low of 8 to a high of 64, and higher scores signify higher level of hope. The reliability of hope subscales: agency, pathways, filler was .72, .84 and .81 respectively.

**Gratitude Questionnaire (GQ, McCullough, Emmons, & Tsang, 2002).** The GQ-6 is a short version to measure of the nature to experience gratitude. Participants rate 6 items on a 1 to 7 point rating scale (1 = "strongly disagree", 7 = "strongly agree"). High

score on gratitude scale indicates a high level of gratitude and low score indicates a low level of gratitude. The reliability of gratitude scale for the current study sample was .87.

**Psychological Well-Being Scale (Ryff, 1989).** Ryff Psychological Well-being scale was used to assess psychological well-being. Urdu version of this scale (Kausar & Aslam, 2010) was used after taking formal permission. Ryff (1989) has explained psychological well-being as consisting of 6 dimensions: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, self-acceptance. The psychological well-being scale has 54 items and each item is rated on 6- point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores on each scale indicate greater well-being on that dimension. The reliabilities of the subscales of psychological wellbeing autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, self-acceptance for the present study sample were .79, .75, .78, .66, .69 and .69 respectively.

## **Procedure**

Permission was sought from respective authors to use their assessment measures. An authority letter explaining the nature of the study was provided from the Institute of Applied Psychology, University of Punjab, Lahore for seeking permission of data collection from authorities of the hospitals. After seeking permission from hospital authorities, a schedule was set with the concerned authorities of hospitals regarding availability of infertile women. Participants were assigned by the hospital authorities. Before administering the questionnaires, participants were briefed about the purpose of research and they were assured about the confidentiality and anonymity of the information provided by them. It took about 45 minutes by a participant to complete assessment measures. After completion of assessment measures, participants were thanked for their cooperation.

## Results

A series of statistical analyses were conducted to test hypotheses. Pearson product moment correlation was applied to examine the relationship between self-compassion and positive psychological functioning in infertile women. Hierarchical regression analyses were applied with self-compassion as predictor of positive psychological functioning in infertile women. An independent sample t test was carried out to examine differences in primary and secondary infertile women in self-compassion and positive psychological functioning.

Table 1  
*Descriptive of the Sample Characteristics*

Variables	Primary infertility		Secondary infertility	
	<i>M(SD)</i>	<i>f(%)</i>	<i>M(SD)</i>	<i>f(%)</i>
Age in Years	29(4.84)		33(7.38)	
Education				
Uneducated		1(3.3)		1(3.3)
Primary		6(20.0)		2(6.7)
Middle		10(30.0)		9(29.7)
Matric		6(20.0)		6(20.0)
Intermediate		5(16.7)		1(3.3)
Graduation		9(29.7)		8(26.7)
Masters		3(10.0)		2(6.7)
Husband Age	31(2.38)		39(4.23)	
Husband Education				
Middle		2(6.7)		3(10.0)
Matric		7(23.2)		1(3.3)
Intermediate		6(20.0)		3(10.0)
Graduation		9(29.7)		7(23.2)
Masters		3(10.0)		6(20.0)
Family Income	54700 (3.44)		64400(3.20)	
Age at the time of marriage	23(3.09)		24(3.24)	
Duration of infertility diagnosis				
2-5years		20(80.0)		30(100.0)
5-10years		10(20.0)		-
Family history of infertility				
Yes		9(30.0)		5(16.5)
No		21(70.0)		25(82.5)
Duration of treatment				
1-5years		23(75.9)		25(82.5)
5-10years		7(23.1)		5(16.5)
Number of children				
1		-		3(10.0)
2		-		27(90.0)

Descriptive statistics showed that mean ages of the women with primary infertility and secondary infertility were 29 and 33 respectively. Education of most of the women were above primary and the house hold income ranged from 54000 to 65000. Age of the marriage was about 23 to 24 and most of them were diagnosed with infertility since 2-5 years and most of them were taking treatment since 1-5 years.

Table 2

*Psychometric Properties of Self-Compassion, Hope, Gratitude and Well-being Scales*

	K	M	SD	Min- Max	Chronbach $\alpha$
Self-Compassion					
Self-Kindness	5	11.60	14.48	5-25	.65
Self-Judgment	5	26.80	9.60	5-25	.74
Common Humanity	4	78.70	5.29	4-20	.76
Isolation	4	9.58	4.80	4-20	-.89
Mindfulness	4	15.38	2.52	4-20	.75
Over Identification	4	15.04	1.63	4-20	.88
Total Self-compassion	26	17.84	1.35	26-130	.79
Hope					
Agency	4	11.22	2.37	4-32	.72
Pathway	4	14.06	1.46	4-32	.84
Fillers	4	11.94	2.17	4-32	.81
Gratitude	6	9.00	1.56	6-42	.87
Psychological Well-Being					
Autonomy	14	7.30	4.80	14-84	.79
Environmental Mastery	14	41.2	2.52	14-84	.75
Personal Growth	14	9.58	1.63	14-84	.78
Positive Relations	14	15.38	1.35	14-84	.66
Purpose In Life	14	15.04	3.34	14-84	.69
Self-Acceptance	14	17.84	3.54	14-84	.69

Psychometric and descriptive analyses were conducted to illustrate mean, standard deviation, minimum-maximum scores and alpha reliabilities of scales. Results revealed that all scales had good to moderate alpha reliability.



Table 3  
*Relationship in Self-Compassion, Hope, Gratitude and Psychological Well-Being in Women with Infertility*

V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
SKN	-	-.12	.14	-.41**	.27*	.05	.39**	.08	.37**	.36*	.19	.23	.19	.35*	-.04	-.15	.19
SJM		-	-.47**	.19	-.01	.46**	.44**	.03	.26*	.22	-.09	-.04	-.05	-.07	.07	.07	.15
COM			-	-.22	.19	.27*	.13	-.16	-.06	.02	-.11	.09	-.09	-.11	.01	.27*	-.12
ISO				-	-.37**	.12	.03	-.15	-.41**	-.42*	-.16	-.39**	-.22	-.31*	-.07	.01	-.39**
MFN					-	.07	.63**	-.04	.42**	.41**	-.17	.19	.16	.21	.13	-.15	-.04
OVI						-	.59**	.07	.24	.07	-.21	-.04	-.09	-.04	-.15	-.11	.11
TSC							-	-.08	.39**	.34**	-.27*	.03	-.01	.02	-.00	-.22	-.06
AGE								-	.09	.14	-.09	.27*	.19	.24	.13	.14	.15
PTH									-	.61**	.27*	.48**	.22	.36**	.09	.08	.27*
FIL										-	.18	.32*	.26*	.32*	.11	-.11	.12
GRA											-	.17	.16	.22	-.06	.25	.18
ATN												-	.51**	.58**	.26*	.16	.46**
ENM													-	.58**	.52**	.42**	.42**
PER														-	.17	.31*	.51**
PSR															-	.21	.13
PIL																-	.26*
SEL																	-

Note. SKN=Self kindness, SJM= Self judgment, COM= Common humanity, ISO=Isolation, MFN= Mindfulness; OI= Over identification, TSC= Total Self-Compassion; GRA= Gratitude; AGE= Agency, PTH= Path way, FIL= Fillers; ATN= Autonomy, ENM= Environmental mastery, PER= Personal growth, PSR= positive relations, PIL= Purpose in life, SEL= Self-acceptance

Results indicated significant relationship of self-compassion (self-kindness) with Hope (agency and pathway) and with psychological well-being (personal growth), self-judgment with Hope (agency), common humanity with psychological well-being, isolation with hope (agency and Pathway) and psychological well-being (autonomy and self-acceptance), mindfulness with hope (agency and pathway) and total self-compassion with all sub scales of hope (agency, pathway and filler).

Table 4  
Hierarchical Regression Analysis Predicting Positive Psychological Functioning in Women with Infertility

	Agency			Pathway			Filler			Gratitude			Autonomy			Environment			Mastery			Personal Growth			Positive Relation to Others			Purpose in Life			Self-Acceptance		
	$\Delta R^2$	$\beta$	$\Delta R^2$	B	$\Delta R^2$	$\beta$	$\Delta R^2$	B	$\Delta R^2$	$\beta$	$\Delta R^2$	B	$\Delta R^2$	$\beta$	$\Delta R^2$	B	$\Delta R^2$	$\beta$	$\Delta R^2$	B	$\Delta R^2$	$\beta$	$\Delta R^2$	B	$\Delta R^2$	$\beta$	$\Delta R^2$	B	$\Delta R^2$	$\beta$			
Step 1	.16																																
Monthly Income		-.12	.24	-.40*	.21	-.05	.02	-.03	.17	-.11	.23	-.50*	.28	-.03	.09	-.05	.03	-.14	.03	-.05	.03	-.14	.13	-.05	.03	-.05	.03	-.14	.13	-.05			
Type of marriage		.15		-.18		.02	-.04	.13		.13	-.19		.03		-.05		-.44*																
Marriage age		-.19		-.14		.06	.02	-.49		-.49	.23	-.11	.07*		-.108		.00																
Step 2	.13		.21		.22	.33	.10		.17		.23		.28		.09		.24																
Self-kindness		-.04		.12		.147		.00		-.03		.09	.17		.00		-.06																
Self-judgment		.02		.11		-.39		-.03		.02		.01	-.19		-.03		.01																
Common Humanity		-.14		-.44		-.33		-.39		-.12		-.43	-.53		-.39		-.26																
Isolation		-.32		.02		-.29		-.25		-.30		.01	-.59*		-.35		.07																
Mindfulness		.25		.32		.12		.19		.25		.38	.42*		.19		.04																
Over identification		-.14		-.44		-.22	.04		-.17		-.40	-.22	-.22	.04	.14		-.13																
R <sup>2</sup>	.44		.44		.43		.19		.42		.43		.53		.29		.39																
F	.35		.15		.33		.42		.33*		.12		.53*		.42**		.23																

Hierarchical regression analysis was applied to see whether self-compassion predicts positive psychological functioning (hope, gratitude and Psychological well-being). Control variables (monthly income, type of marriage and age) were entered in the first step. In second step self-compassion was entered. Results showed that self-compassion (isolation and mindfulness) predicts psychological well-being (personal growth) after controlling the effect of demographic characteristics. Statistical model is presented below.

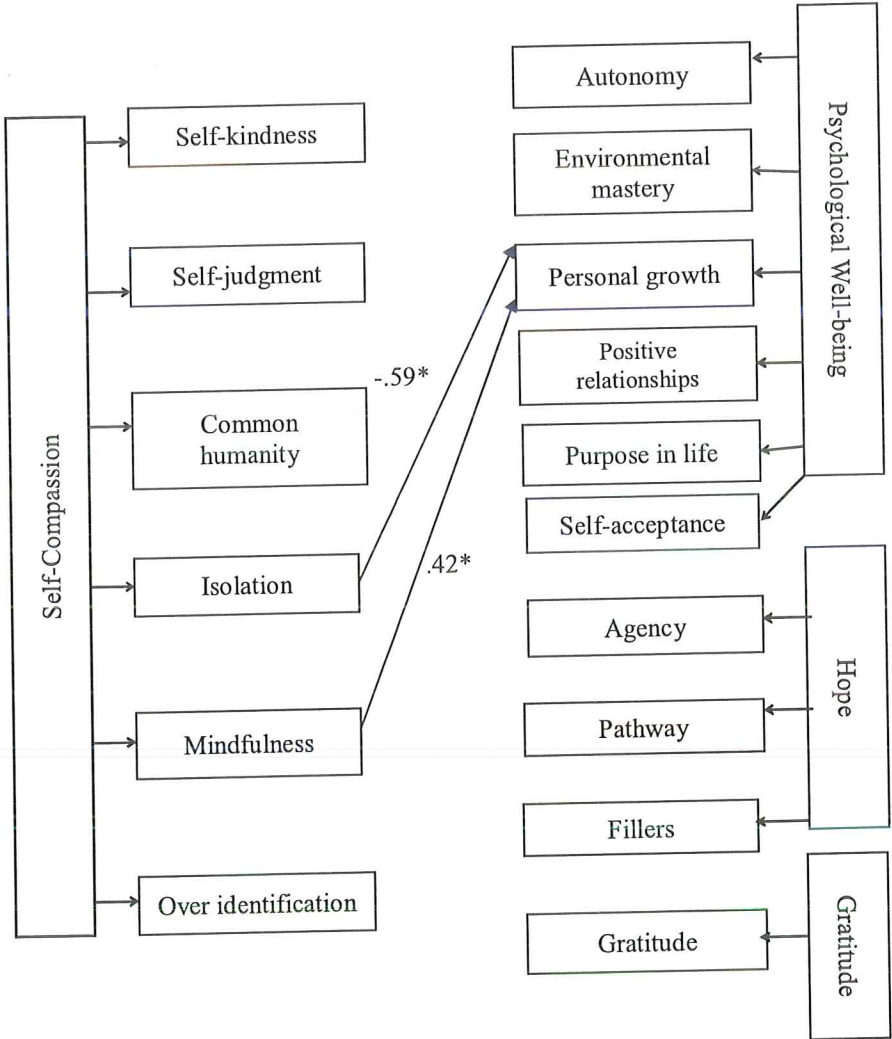


Figure1. Statistical Model for the Predictors of Positive Psychological Functioning in Women with Infertility

Table 5

*Mean Differences in Self-Compassion and Positive Psychological Functioning in Women with Primary and Secondary Infertility*

V	Primary Infertility		Secondary Infertility		t	P	95%CI		Cohen's d
	M	SD	M	SD			LL	UL	
<b>Self-compassion</b>									
SKN	3.33	.79	3.30	.67	.86	.46	[-.35, .41]		0.04
SJM	3.10	.66	2.78	.62	.56	.75	[-.01, .66]		0.66
COM	3.22	.65	3.44	.62	.19	.88	[-.55, .11]		-0.35
ISO	2.72	.52	2.85	.61	.34	.41	[-.44, .15]		-.23
MFN	3.66	.82	3.33	.85	.14	.69	[-.11, .76]		0.39
OVI	2.23	.73	3.99	.71	.01	.05	[.12, .86]		0.72
TSC	3.22	.29	4.16	.26	.03	.01	[.011, .29]		0.56
<b>Hope</b>									
AGE	22.90	5.74	22.56	4.19	.26	.79	[-2.27, 2.93]		0.07
PTH	22.97	5.89	24.33	4.16	-1.04	.30	[-4.00, 1.27]		-0.27
FIL	20.53	6.03	21.67	5.80	-.74	.46	[-4.19, 1.92]		-0.19
GRA	27.37	5.44	28.63	6.92	-.79	.44	[-4.48, 1.95]		-0.20
<b>Psychological Well Being</b>									
ATN	56.73	7.46	59.67	6.09	-1.67	.10	[-6.45, .59]		-0.43
ENM	55.06	6.09	59.53	6.29	-2.79	.01	[-7.67, -1.27]		-0.72
PER	54.57	6.98	57.63	6.53	-1.76	.08	[-6.56, .42]		-0.42
PSR	54.83	8.23	59.27	11.68	-1.67	.09	[-9.66, .79]		-0.44
PIL	55.77	6.69	56.30	6.81	-.31	.76	[-4.02, 2.95]		-0.08
SEL	54.57	10.13	58.03	9.27	-1.38	.17	[-8.49, 1.55]		-0.36

*Note.* SKN=Self kindness, SJM= Self judgment, COM= Common humanity, ISO=Isolation, MFN= Mindfulness; OI= Over identification, TSC= Total Self-Compassion; GRA= Gratitude; AGE= Agency, PTH= Path way, FIL= Fillers; ATN= Autonomy, ENM= Environmental mastery, PER= Personal growth, PSR= positive relations, PIL= Purpose in life, SEL= Self-acceptance

Results showed that women with secondary infertility were more self-compassionate (over identification) and had better psychological well-being (environmental mastery) as compared to women with primary infertility.

## Discussion

The present paper investigated relationship in self-compassion and positive psychological functioning (hope, gratitude and psychological well-being) in women with primary and secondary infertility. This section discussed the major findings of the research with reference to the earlier findings for the topic under study.

Results found significant relationship in self-compassion and positive psychological functioning in women with infertility. According to Neff (2009), self-compassion involves association and motivation towards health, and comfort for oneself. Such individuals meet their own stance of suffering, insufficiency, or shortcomings with understanding and insight rather than using criticism and judgment (Neff, 2009).

Results are in line with the recent research conducted by Sami and Tazeen (2014). They concluded that being compassionate in difficult situation, such as infertility, is positively related to psychological well-being. Another research by Cousineau and Domar (2012) also revealed that hope and optimism are positively related with psychological well-being of infertile couples. Vahidi, Ardalan, and Mohammad (2014) also concluded that infertile women with higher level of self-compassion had higher level of hopes about future.

Gilbert (2005) suggests that self-compassion develops well-being because it facilitates person to feel cared, associated, and sensitively calm. Snyder and Lopez (2007) also explored psychological contributors to self-compassion and hope in inhabitants opposite the bio-medical circumstances of infertility. Furthermore, a social supplier to health standing was explored not directly via congregation information on how women with infertility make use of infertility-specific online hold up groups. Finally, individual's well-being and infertility modification were examined as two outcome variables related to health status for this population. Present study revealed a positive relationship between self-compassion and gratitude, psychological well-being and hope

which also facilitates the above mentioned hypothesis. A large number of studies have shown self-compassion to completely relate with markers of psychological well-being, including optimism, pleasure (Neff, Rude, & Kirkpatrick, 2007), and self-acceptance (Neff, 2003b).

Apart from the self-compassion the role of demographic characteristics is also very important in determining the level of psychological well-being. Previous researches revealed that women having educated husbands are psychologically well as compared to women with uneducated husband. Similarly duration of marriage plays significant role, researches revealed that women had more than 5 years of marriage with no child are more distressed and less hopeful about life as compared to women had marriage less than 5 years (Hart, 2013; Cwikel, Gidron, & Sheiner, 2004).

Self-compassion was correlated with infertility-related pressure inversely for women with primary and secondary infertility, having in that order, a large effect size and a standard effect size. The relationship between higher self-compassion, including its part of mindfulness, and lowered infertility-related pressure follows rationally, based on previous research linking mind/body techniques to humanizing infertility adjustment (Lemmens et al., 2004).

Results found non-significant differences in psychological well-being in primary and secondary infertility. Women with secondary infertility had better psychological well-being as compared to women with primary infertility. These results are in accordance with existing literature. Greil, Blevins, and McQuillan (2013) investigated levels of gratitude in women with primary and secondary infertility. Their findings revealed that women with secondary infertility had the same level of gratitude as women with primary infertility. Similar results were found in the study of Slade, O'Neill, Simpson, and Lashen, (2015), where they concluded that women with primary infertility are equally psychologically well as women with primary infertility.

Epstein and Rosenberg(2005) stated the type of infertility failed to make a distinction with hope, well-being and gratitude. The shielding compensation of positive psychological functioning could maybe spread beyond the defending factor of already having a child such that psychological well-being is a general coping strategy that holds potential for women experiencing different types of infertility. In both groups of women with infertility, remind oneself that others have also experienced the same pain, and to be in touch with their pain without it being uncontrollable for them, was connected to less stress and greater levels of well-being (Vayena, Rowe, & Griffin, 2014).

## **Conclusion**

In conclusion, self-compassion (self-kindness) was related with hope (agency and pathway); and psychological well-being (personal growth), and self-compassion (self-judgment) was related with hope (agency); self-compassion (common humanity) with psychological well-being; self-compassion (isolation) with hope (agency and Pathway); and psychological well-being (autonomy and self-acceptance), and self-compassion (mindfulness) with hope (agency and pathway); and total self-compassion with all sub scales of hope (agency, pathway and filler). Moreover, self-compassion (isolation and mindfulness) predicted psychological well-being (personal growth). Results showed that women with secondary infertility were more self-compassionate (over identification) and had better psychological well-being (environmental mastery) as compared to women with primary infertility.

## **Limitations and Recommendations**

Despite the importance of this topic, there are certain limitations. The sample consisted of only 60 infertile women due to the unavailability and hesitance of the participants. So this research may limit its generalizability so it is recommended in future researches to draw a large sample for more reliable and valid results. Secondly, participant were not comfortable to fill Ryff psychological well-being scale due to a large number of items so it

is recommended to use shorter version of the scale in future studies.

### Implications

This study's greatest research implication was its demonstration of the significance of studying positive psychological constructs for understanding the well-being of women experiencing infertility by adopting a more composite view of infertility that goes beyond its mere biological effects. Although a wide range of studies have addressed infertility's impact on negative aspects of functioning, such as depression and anxiety, few studies have explored how infertility relates to positive aspects of functioning. It has been established that positive functioning is more than the absence of negative variables just as it has been established that health is more than the lack of disease. The current study increases the information of how the knowledge of infertility is connected to cognitive and emotional aspects of well-being, and introduces the constructs of self-compassion and hope, gratitude and psychological well-being as relevant and important positive psychological variables worthy of further exploration in women with primary and secondary infertility. Despite experiencing a difficult health situation such as infertility, self-compassion and positive psychological functioning can be related to positive outcomes.

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