Rejection Sensitivity and Job Performance: Workplace Loneliness as Mediator and Emotional Culture of Companionate Love as Moderator

Hafiz Ghufran Ali Khan
International Islamic University, Islamabad, Pakistan
Email: hafiz.ghufran@iiu.edu.pk

Muhammad Salman Chughtai
International Islamic University, Islamabad, Pakistan
Email: chughtai0092@gmail.com

Amir Bashir
International Islamic University, Islamabad, Pakistan
Email: aambas@hotmail.com

Usman Kaleem Paracha
International Islamic University, Islamabad, Pakistan
Email: usmankaleemparacha@gmail.com

Abstract

Incorporating the understandings from affect theory of social exchange and rejection sensitivity theory, this study investigates relationship between rejection sensitivity and job performance. This study investigates how rejection sensitivity (RS) reduces job performance (JP) by acknowledging workplace loneliness (WL) as potential mediator and emotional culture of companionate love (ECCL) as a crucial contingency of the mediation effect. We test moderated mediation model by using sample of 291 workers and managers from textile sector at two different intervals and the analysis of data showed a negative relationship between RS and JP via WL with its decreasing strength within the ECCL. Results of our study have imperative suggestions for the organizations in vindicating the adverse effects of workers tendency towards feelings of loneliness and sensitivity towards rejection through the development of emotional culture of companionate love.

Keywords: rejection sensitivity, workplace loneliness, emotional culture of companionate love, job performance, manufacturing sector.

1. Introduction

Many scholars have investigated the necessity of close interpersonal relationships and the resulting effects of relational loss and rejection (Baumeister & Leary, 1995; Bowlby, 1969, 1973; Erikson, 1963). Concept of rejection sensitivity has been explored by different scholars (Downey & Feldman, 1996; Downey et al., 1998; Feldman & Downey,

1994). Individuals who are sensitive about rejection sensitivity are more profound and overact to social rejection especially at workplace. That sensitivity of rejection causes loneliness, depression and anxiety and negative effects on physical and psychological health. A causal link was established between rejection sensitivity and loneliness, which results in sadness and feeling of separation from others in the society and workplace as well (London et al., 2007). According to Baumeister and Leary (1995), rejection by peers and supervisors is a social phenomenon that has severe effects on the sufferers, especially on employees of an organization at workplace. Loneliness as defined by the Rook (1984), a hostile emotional state in which an individual feels that he/she rejected by his/her peer or supervisor or any other at workplace, or an individual feels that his/her social close relationship in society or in workplace are not secure. That state of mind effect physical and psychological health which resulted into decrease in efficiency and performance at workplace(Chakraborty & Chakravarti, 2019). Conversely, T'ng et al. (2019), stated that loneliness causes of insecurity, hostile, anger, physical and verbal aggression and these behaviors predicted from rejection of society or rejection from workplace(Coplan, Closson, & Arbeau, 2007; Hawkley & Cacioppo, 2010; Jeong et al., 2016) that reduce performance and creativity as well (Peng et al., 2017).Organizational culture literature has mostly ignored the emotional culture existing in the work environment and there is need to study the crucial role played by the cognitive culture (Barsade & O'Neill, 2014). Furthermore, O'Reilly and Chatman (1996), discussed that there are few examples in literature where emotions typically described how sharing of intellectual values leads to positive feeling of employee. To achieve enhanced performance, there is need to understand how emotions plays their role in the workplace environment. Cultural and evolutionary psychologists also support the notion of development of culture of companionate love in the work environment, incidentally display of emotions provide clarifications of different complications at workplace and offer opportunities to the group member for group's success(Keltner & Gross, 1999; Keltner & Haidt, 1999). On the other hand, Parkinson et al. (2005) discussed that from a function point of view, a culture of companionate love offers a satisfactory way of meeting their reciprocal responsibilities with care of each other within the group and organization. Companionate love is described as "a complex functional whole including appraisals and appreciations, subjective feelings, expressions, patterned psychological processes, action tendencies and instrumental behaviors"(Hatfield et al., 1982). Affect theory of social exchange of Lawler (2001, 2006), explains that at workplace there is exchange of emotions and feelings that successful exchange of feelings and emotions resulted into good relations and networks contrary to this, unsuccessful exchange resulted into anger, hostile. These exchange of emotions and feelings at workplace create positive social interactions i.e. companionate of love and actors of these reciprocal emotions understand how to reproduce them in future for the better outputs(Lawler, 2001, 2006). Ozcelik and Barsade (2018), investigated the relationship amongst workplace loneliness and job performance, basing their research on Lawler'saffect theory of social exchange (2001, 2006) and regulatory loop model of loneliness and developing a relationship incorporating workplace loneliness. Rejection sensitivity theory(Downey & Feldman, 1996)explains that individuals who are much sensitive regarding rejection from the society "tend to anxiously expect, readily perceive and overreact to it". Rejection sensitivity theory

(Downey & Feldman, 1996) further explains that individuals when expect rejection from their partners, society and peers, they led to feel insecure, show dissatisfaction about their relationship and want to leave from that situation and relationship, moreover, that rejection sensitivity shows lonely behavior among the teams members at workplace that resulted into decrease in performance.

To the best of our knowledge, 'rejection sensitivity' as antecedent of 'workplace loneliness' has not been explored as highlighted by Ozceik and Barsade (2018) who suggested further examination of possible antecedents of workplace loneliness, including whether different types of cognitive attributions lead to different levels and types of workplace loneliness. This study also overcome suggestion of Anand and Mishra (2019), as they suggested that there is need of further research to investigate the loneliness at different organizational level, with time-lagged. Accordingly, aim of this research is to investigate the influence of rejection sensitivity on job performance, and examine the effects of workplace loneliness as mediator which also cause of rejection sensitivity; also investigate emotional culture of companionate love as moderator between these relationships by using moderated mediation model. This research contributes to the literature HRM by highlighting that how workplace loneliness works as antecedent of rejection sensitivity at workplace especially in manufacturing sector, secondly our work contributed to placing ECCL as potential moderator that enhance job performance and reduce the level of rejection sensitivity and workplace loneliness, thirdly our research contributes to the literature of psychology by highlighting the moderating effect of ECCL that effect the physical and psychological health of the individuals and reduce the negative emotions and feelings. Furthermore, out investigation findings especially ECCL as moderator provide practical implications for the policy makers and practitioners of manufacturing firms especially in textile sector.

2. Literature Review

2.1 Rejection Sensitivity and Job Performance

The aspiration to attain recognition and to circumvent dismissal or refusal is broadly admitted to be vital social intention (Horney, 1937; Rogers, 1959; Sullivan, 1937). Fear of rejection from peer is a dominant perception of both present and future relationship as problem (Buhs & Ladd, 2001; Dodge et al., 2003; Parker & Asher, 1987). Such problems consist of anger, societal nervousness and loneliness that affect the physical and psychological comfort zone of the individuals that resulted to reduction in well-being and upset social functioning especially at workplace. According to Riva and Galimberti (1998), in everyday life, corporeal togetherness reflected as selective feature of association, collaboration and affiliation, so in simple words relationship means the individual communication between the persons in the society. Interpersonal and intergroup interactions of relationships are the sort of a relationship where horror of rejection can be established (Shelton & Richeson, 2005; Shelton, Richeson, & Bergsieker, 2009), that interactions between the groups generally result into distraught, troubled, undeveloped, inappropriate and incompatible relationships (Richeson & Trawalter, 2005; Trawalter & Richeson, 2008; Trawalter et al., 2009; Vorauer &

Sakamoto, 2006) and these type of complications and hitches are foundation for offer of rejection (Shapiro et al., 2011). Rejection sensitivity is related to social avoidance and distress and this social segregation of the individuals give rise to negative results (Jaremka et al., 2013; Tang & Richardson, 2013), consequently these negative result symptoms further caused into low performance of employees at workplace. Romero-Canyas et al. (2010), advocates that acceptance and refusal is a fortunate element of awareness, which reflects the prerequisite of an individual for survival in the society and creation of bio-psychosocial history. Rejection sensitivity is a cognitive affective processing dynamic, which is regarded as motivation system, that proposed to self-treatment about the rejection from the other people of society (Özen & Güneri, 2018). Job performance is a key element in the organizational psychology (Sonnentag & Frese, 2002) and job performance is concerned with individual's behavior about the accomplishment of assigned task (Fogaça et al., 2018). Sensitive people about rejection form the society reduce their interaction with fellow workers and do not seed guidance or help and limit their social circle. In line with RS theory (Downey & Feldman, 1996) we proposed the following hypothesis:

➢ **H₁:** Rejection sensitivity negatively affects job performance.

2.2 Rejection Sensitivity and Workplace Loneliness

Loneliness is a state which occurs when individuals feel that their personal and social needs are not appropriately fulfilled, and these feelings are painful for individuals and have negative consequences for organizations as well (Cacioppo & Hawkley, 2009; Cacioppo et al., 2006; Cacioppo & Patrick, 2008) due to this individuals behave aggressively with others (Tılfarlıoğlua & Eklerb, 2019) thus rejection sensitivity cause of loneliness (Zhou et al., 2018). The adverse effects of workplace loneliness are because individuals being a human require mutual caring relationships and require to fulfill social needs from other actors, whenever these needs not met at personal levels, individuals feels to withdrawal from that relationships(Barsade & O'Neill, 2014; Rook, 1984). Loneliness does happen in isolation and is relational in nature, so therefore workplace loneliness not only affect the lonelier persons and they feel about themselves but it also effect the feelings and emotions of others(Cacioppo & Hawkley, 2009; Cacioppo & Patrick, 2008). Results of study conducted with sample size of 103 psychiatric inpatients, discloses that rejection sensitivity cause of loneliness that further lead to suicide ideation independently (Brown et al., 2019), researchers also suggested that there is need to uncover the relationship between rejection sensitivity and other behavioral reactions. In line with the study of Zhou et al. (2018) who done longitudinal study and found that low self-esteem predicted rejection sensitivity that further predicted workplace loneliness(Watson & Nesdale, 2012) and have negative physical and psychological outcomes (Fontanaa et al., 2018). Findings of meta-analysis by Gao et al. (2019), shows that rejection sensitivity associated with aggression leads to withdrawal from relationship i.e. loneliness, the researchers also suggested that there is need to examine the moderating or mediating factors among these relationships (Shuling Gao et al., 2019). Based on the RS theory (Downey & Feldman, 1996) we propose the following hypothesis:

➢ **H₂**: Rejection sensitivity positively affects workplace loneliness.

2.3 Workplace Loneliness and Job Performance

Loneliness at workplace is the cause and result of superficial work stress for workers and management(Keser & Karaduman, 2014; Wright, 2012), that stress is then linked with reduction of job performance(Dussault & Thibodeau, 1997). Workplace loneliness is augmentation of the wisdom of loneliness in the arena of management of organizations(Tabancali, 2016), that have an momentous influence on working behaviors, psychological and physical health of employees of the organization; which further leads to decline in the performance of employees (Amarat et al., 2018; Lam & Lau, 2012).Loneliness affects the individual's health psychologically, emotionally, physically and mentally (Luo et al., 2012; Theeke, 2009; Wilson et al., 2007).Every organization needs human, financial and technological sources to perform the operations of business, but the main component of every business is human resources, which drives the other components at the workplace for the accomplishment of organizational goals and objectives. Job performance is the documented evidence of employees about their execution of task which is given to them by the management to perform within the given period (Hoppock, 1957; Kane & Lawler, 1979) and it is readiness and sincerity of individuals to attain novel features of profession that further increase their productivity(El-Sabaa, 2001), that further categorized by researchers into task and contextual performance(Borman & Motowidlo, 1997; Katz & Kahn, 1978). Job performance is concerned with the financial and non-financial value that an employee gives to the organization directly and indirectly during the accomplishment process of organizational goals (Borman & Motowidlo, 1993, 1997).Job performance is the main element for the achievement of organizational missions, therefore, organizations depends on their workforce, because successful organizations invest in their human capitals than other capitals i.e. financial, mechanical and technological. Based on the RS theory (Downey & Feldman, 1996) we propose the following hypothesis:

➢ **H₃**: Workplace loneliness is negative related to job performance.

2.4 Workplace Loneliness as Mediator

Loneliness is very sensitive understanding of emotions, which occurs every in the world in every type of society. When people at workplace are unable to have dynamic association with co-workers then they feel loneliness (Ay, 2015). Literature about loneliness shows that workplace loneliness is linked with different aspects of the employees and organization i.e. aggression (Soo Ting T'ng et al., 2019), creativity (Peng et al., 2017), communication (Sanduleac & Mariniuc, 2018), organizational citizenship behavior and job performance(Lam & Lau, 2012; Ozcelik & Barsade, 2018) turnover intention(Chen et al., 2019; Erdil & Ertosun, 2011), job satisfaction (Wright, 2005), well-being (Ozcelik & Barsade, 2018; Peng et al., 2017),depression (Guo, Cai, Wang, & Li, 2017; Teo et al., 2018)and happiness (Erdil & Ertosun, 2011). Furthermore, Kong and You (2013), reveals in their research that loneliness and self-esteem mediates the relationship of social support and life satisfaction. Wang et al. (2016), concluded that there is full mediation of loneliness and sense of control between impression management and life satisfaction. Ren et al. (2017), used loneliness ad mediating variable between the

relationship of social anxiety and internet addition and founds that loneliness mediates this relationship. On the other hand, Cao and Liang (2017), investigate the mediatory effect of loneliness and their study results demonstrates that loneliness and self-esteem, partially mediates the association between partial social support and life satisfaction. While results of study by Zhou et al, (2018) discloses that rejection sensitivity cause of loneliness but there is no mediation found between the relationship of low self-esteem and depression. Bases on rejection sensitivity theory (Downey & Feldman, 1996) we propose the following hypothesis:

> **H₄:** Workplace loneliness mediates the relationship between rejection sensitivity and job performance.

2.5 Emotional Culture of Companionate Love as Moderator

Emotional culture of companionate love involves emotions of love , kindness, care and sensitivity for co-workers at workplace (Reis & Aron, 2008), that have a positive relationship with the employees' level of satisfaction, teamwork and have negative association with absenteeism, emotional exhaustion, better mood and life quality. Emotional and cognitive theories of organizational culture are interlinked with this these both negative and positive relationships (Barsade & O'Neill, 2014). Emotions have a different role to play in organizational outcomes than cognition (Robinson et al., 2013). In a culture of companionate love, co-workers actively share their feelings and support for each other on regular basis and all co-workers care for each other (Barsade & O'Neill, 2014). On the other hand, where there is on such culture in the organization regarding companionate love, warmth, attentive and empathic emotions minimize among the co-workers and they show indifference or even insensitivity towards each other, and do not provide help during distress in the workplace (Lilius et al., 2011). Companionate love is a social emotion, because it focuses on interrelationship that is shaped in a social context; and in organizational culture, it impacts workplace on collective level (Barsade & O'Neill, 2014; Gonzaga et al., 2001). Result of previous studies directs that lack of desired companionship cause of social isolation and loneliness(Cohen-Mansfield & Eisner, 2019; Morgan et al., 2019; Wright-St Clair et al., 2017).In the presence of strong culture of companionate love, the workplace loneliness also exists but this shows that culture of the organization is not perfectly a solution of loneliness (Ozcelik & Barsade, 2018), as use of ECCL the relationship between loneliness and job performance, because individuals spend major portion of their time and life at workplace and interconnect with others i.e. subordinate, peers, and supervisors (Ozcelik & Barsade, 2018). Based on the theory of affect theory of social exchange (Lawler, 2001, 2006), we propose the following hypothesis:

> **H₅:** Emotional culture of compassionate love moderates the negative relationship between emotional love and job performance, (such that the negative relationship between emotional love and job performance will be weaker at higher level of emotional culture of compassionate love).

> **H₆:** Emotional culture of compassionate love moderates the indirect effect of rejection sensitivity and job performance via workplace loneliness (in the sense that higher level of emotional culture of compassionate love will weaken the indirect effect).
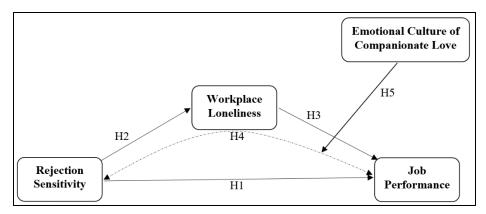
Figure 1: Conceptual Model

3. Research Methodology

In this exploratory research, positivistic paradigm was followed because of the use of scientific methods of investigation and analyzing the quantitative results to test the hypothesis. Population for this research was comprised of six textile organizations "Masood Textile Mills Ltd (Apparel & Mills Division, K & Emms Private Limited, Klash Dying House, AZ Apparel (Pvt) Ltd and Interloop Limited, with sampling frame of management cadre (General Managers, Deputy General Managers, Sr. Managers and Managers) and workers (Merchandisers, Line Managers, Senior Officers, Officers, Supervisors) of textile sector (Faisalabad Region) of Punjab, Pakistan. Initially, the respondents of this research which were briefed about the nature of the research before the distribution of questionnaire and were asked to give their opinions, initially 450 questionnaires were distributed to employees of six different textile firms with coding on the questionnaires and 375 completed from all aspects survey forms were received back. Second survey was presented to same 350 respondents from which 325 completed questionnaires were received back and final response rate of survey was 54 percent from the respondents who completed the both survey questionnaire from all aspects.

4. Research Tools

Rejection Sensitivity was assessed by using 06 items scale adopted from (Downey & Feldman, 1996) and rated on 05-point likert scale, ranging from 1 to 5 "Very Unconcerned" to "Very Concerned" (one-item has been removed during the dimension reduction analysis of the scale items, which was not matched with the organizational and social context of the population of this study). *Job Performance* was assessed by using 07 items scaled adopted from (Welbourne et al., 1998), (one-item has been removed during dimension reduction analysis of the scale items, which was not matched with the organizational and social context of the population of this study. *Workplace Loneliness* was assessed by using 07 items scale adopted from (Wright et al., 2006), this scale contains two dimensions namely "social companionship" and "lack of social companionship", in this study we adopted the second dimension. *Emotional Culture of*

Companionate Love was assessed by using 04 items scale adopted form (Barsade & O'Neill, 2014), these all items were rated on 05-point likert scale, ranging from "1-5", "Strongly Disagree - Strongly Agree".

5. Results

5.1 Demographic Results

Demographics reveal that majority of the respondents (workers) were male i.e. 76.6% whereas 23.4% were female and management cadre 24.19% were female whereas 75.81% were male. 52.2% belongs to the age group between 20-30 years, 37.5% lies between 31-40 years and 10.30% lies between 41-50. Accordingly, 14.8% respondents have matriculation qualification, 8.6% were intermediate, 28.9% wee graduates, 39.9% were masters and 7.9% having M. Phil degrees. Out of the total of 291 respondents, 48 (16.49%) belongs to Masood Textile Mills Ltd (Apparel Division), 50 (17.18%) persons belongs to K & Emms Private Limited, 50 (17.18%) persons belongs to Klash Dying House, 43 (14.78%) respondents belongs to AZ Apparel (Pvt) Ltd, 50 (17.18%) respondents belongs to Masood Textile Mills Ltd (Mills Division) and 50 (17.18%) persons belongs to Interloop Limited.

Table 1: Factor Loading, Composite Reliability and Average Variance Extracted

Variable	Measurement Items	Factor Loading
Rejection Sensitivity (Self-Reported), T-1 Alpha = .62 CR = .629 AVE = 0.513		
RS01	You approach a close friend to talk after doing or saying something that seriously upset him/her.	0.566
RS02	You ask your manager/supervisor for help with a problem you have been having at work.	0.718
RS03	You ask someone in one of your colleagues to coffee/tea.	0.725
RS04	You ask a colleague to do you a big favor.	0.633
RS06	You ask a friend if you can borrow something of his/hers.	0.516
Workplace Loneliness (Self-Reported), T-1 Alpha = .77 CR = .761 AVE = .553		
WL01	I have social companionship/fellowship at work (R).	0.582
WL02	I feel included in the social aspects of work (R).	0.667
WL03	There is someone at work I can talk to about my day to day work problems if I need to (R).	0.782
WL04	There is no one at work I can share personal thoughts with if I want to.	0.516
WL05	I have someone at work I can spend time with on my breaks if I want to (R).	0.570
WL06	I feel part of a group of friends at work (R).	0.660
WL07	There are people at work who take the trouble to listen to me (R).	0.696
Emotional Culture of Companionate Love (Self-Reported), T-2 Alpha = .65 CR = .855 AVE = .599		
ECCL01	Affection	0.818
ECCL02	Caring	0.880
ECCL03	Compassion	0.847
ECCL04	Tenderness	0.788
Job Performance (Supervisor-Rated), T-2 Alpha = .81 CR = .815 AVE = .653		
JP01	This employee satisfactorily completes assigned duties.	0.786
JP02	This employee is an effective performer.	0.789
JP03	This employee is a good individual contributor.	0.748
JP04	This employee works as part of a team or work group.	0.708
JP05	This employee makes sure his or her work group succeeds.	0.638
JP06	This employee responds to the needs of others in his or her work place.	0.634

Table 2: Descriptive Statistics, Reliability and Correlations

	Descriptive Statistics, Correlations and Alpha										
		Mean	SD	1	2	3	4	5	6	7	8
1	Gender	1.23	0.42	1							
2	Age	1.58	0.67	-.321**	1						
3	Education	3.82	1.17	-.349**	.262**	1					
4	Experience	2.32	0.86	-.309**	.531**	.245**	1				
5	RS	3.55	0.71	-.188**	.098	.022	.046	(.62)			
6	WL	2.33	0.67	.164**	-.080	.097	-.310**	-.316**	(.77)		
7	ECCL	3.97	0.85	-.063	.072	-.207**	.114	.383**	-.367**	(.65)	
8	JP	4.04	0.61	.062	-.027	-.240**	.132*	.367**	-.527**	.550**	(.81)
	**. Correlation is significant at the 0.01 level (2-tailed). N = 291										
	*. Correlation is significant at the 0.05 level (2-tailed). Reliability Statistics are in parenthesis										

Table 3: Correlation Analysis of First Three Hypothesis

	Hypothesis	R
H₁	Rejection Sensitivity negatively affects Job Performance	0.367**
H₂	Rejection Sensitivity positively affects Workplace Loneliness.	0.316**
H₃	Workplace Loneliness is negatively related to Job Performance.	-0.527**
*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).*		

Table 2 indicates the descriptive statistics, reliabilities statistics and correlations among the all variables of the study. Correlations of RS with WL is (r = 0316**, p < 0.01), RS with ECCL is (r = 0.383**, p < 0.01), RS with JP is (r = 0.367**, p < 0.01), WL with ECCL is (r = -0.367**, p < 0.01), WL with JP is (r = 0.527**, p < 0.01) and ECCL with JP is (r = 0.550**, p < 0.01). All the relations are statistically significant with each other thus, *supporting H₁, H₂, H₃.*

Table 4: Hierarchical Regression Analysis

Variable	Job Performance			
	M1	**M2**	**M3**	**M4**
Intercept	4.261***	2.913***	4.141***	2.03***
Gender	0.025	0.135	0.197**	0.157*
Age	-0.074	-0.099	-0.047	-0.106*
Education	-0.143	-0.132***	-0.088***	-0.072**
Experience	0.177***	0.188***	0.071	0.145***
RS		-0.333***	0.226***	0.197***
WL			-0.388***	
ECCL				0.308***
R^2	0.102	0.247	0.383	0.388
ΔR^2	0.089	0.234	0.37	0.375
F	8.081***	18.679***	29.342***	30.046***
*N= 291; ***p < .001; ** p<0.01; * p<0.05 (two-tail test)*				
Unstandardized regression coefficients were reported				

Table 4 demonstrates the hierarchical regression results summary, according to these results RS have negative and significant influence on JP (β = -0.333***, p < 0.001), WL have negative and significant influence on JP (β = -0.388***, p < 0.001) and ECCL have positive and significant influence on JP (β = 0.308***, p < 0.001).

Table 5: Mediation Analysis

Model	Effect	SE	LL 95% CI	UL 95% CI
Mediation effects of X on Y				
Total	0.31	0.07	0.18	0.45
Direct	0.19	0.06	0.07	0.31
Indirect	0.12	0.03	0.07	0.19
Completely standardized indirect effect of X on Y				
WL	0.14	0.03	0.09	0.21
R-squared mediation effect size (R-sq_med)				
WL	0.09	0.03	0.04	0.16
N= 291; Bootstrap sample size = 5000; LL, lower limit; UL, upper limit; CI, confidence				

Table 5 shows the mediation effects of WL between the relationship of RS and JP, mediation effect was analyzed by using model 4 (Preacher & Hayes, 2005, 2008). Results of the study demonstrate that relationship of WL and JP fully mediated by WL where (Direct effect = 0.31 (0.18, 0.45), Indirect effect = 0.19 (0.07, 0.31), Total effect = 0.12 (0.07, 0.19), *thus it supports H_4.*

Table 6: Moderation Analysis

Moderation Model of Emotional Culture of Companionate Love						
Variable	**Job Performance**					
	M1			**M2**		
	β	**SE**	**t**	**β**	**SE**	**t**
Intercept	4.26***	0.22	19.10	4.08***	0.18	22.87
Gender	0.03	0.09	0.28	0.15*	0.07	2.05
Age	-0.07*	0.06	-1.19	-0.06	0.05	-1.14
Education	-0.14***	0.03	-4.49	-0.06*	0.03	-2.26
Experience	0.18***	0.05	3.67	0.05	0.04	1.37
WL				-0.31***	0.05	-6.52
ECCL				0.28***	0.04	8.11
WL x ECCL				0.14**	0.05	2.86
R^2	0.10			0.47		
ΔR^2	0.09			0.46		
F	8.08***			35.487***		
N = 291; ***p < .001; ** p<0.01; * p<0.05						

Table 6 depicted the moderation results of this study, according to the above given table ECCL moderate the relationship of WL and JP where (β = 0.14, p < 0.01), *thus supporting H_5.*

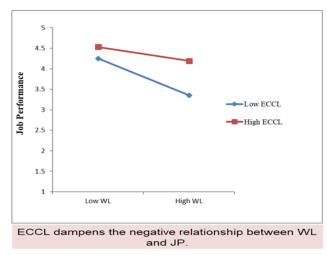ECCL dampens the negative relationship between WL and JP.

Figure 2: Moderation Interaction (WL x ECCL)

Interaction graph for low and high (Mean ± SD) moderator values was plotted. The interaction graph shown in Figure 2 indicates a significant moderation relationship of ECCL between the relationship of WL and JP. According to the interaction graph, high level of ECCL reduces WL which as a result weaken the relationship of WL and JP and enhance the performance of employees.

Table 7: Conditional indirect effect(s) of X on Y at values of the moderator(s)

Direct Effect of X on Y					
Effect	**SE**	**t**	**p**	**LLCI**	**ULCI**
0.09	0.04	2.22	0.03	0.01	0.17
Conditional indirect effect(s) of X on Y at values of the moderator(s):					
Mediator	**ECCL (Moderator)**	**Effect**	**Boot SE**	**Boot LLCI**	**Boot ULCI**
WL	-0.85	0.12	0.03	0.07	0.19
WL	0.00	0.09	0.02	0.05	0.14
WL	0.85	0.06	0.02	0.03	0.11
95% 'Confidence Interval', **LL** 'Lower Limit', **UL** 'Upper Limit'					

Table 8: Index of Moderated Mediation

Index of Moderated Mediation				
Mediator (WL)	**Index**	**Boot SE**	**Boot LLCI**	**Boot ULCI**
Moderator (ECCL)	-0.03	0.02	-0.07	-0.01
95% 'Confidence Interval', **LL** 'Lower Limit', **UL** 'Upper Limit'				

Table 7 demonstrates the direct and indirect moderation effect on the mediated relationship of WL and JP and all results found significant, lastly Table 8 shows the moderated mediation results where (index = -0.03, boot SE = 0.02, LLCI = -0.07, ULCI =

-0.01), which proves that there is moderated mediation, means ECCL weaken the relationship of RS and JP via WL, *thus it proves H6.*

6. Discussion

The general aim of this research is to investigate the direct effect of rejection sensitivity on loneliness and job performance and moderating effect of emotional culture of companionate love. In line with the research of Watson and Nesdale (2012), rejection sensitivity affects the behaviors of others, which eventually results in collapse of relationships and dissatisfaction. Overall, the results of this study support our proposed hypothesis. Firstly, consistent with H_1, H_2, H_3, we found encouraging linkage between RS and WL and JP as supported by (Chang, 2017; Guo et al., 2017; Jianhua Zhou et al., 2018; Teo et al., 2018) where they argued that RS predictor of WL that decrease the performance of individuals at workplace. Consistent with H4 there is negative mediating effect between the relationship of RS and JP by unpacking the concept of rejection sensitivity theory (Downey & Feldman, 1996). Finally, consistent with H_5 and H_6 this study found that for the enhancement of performance of individuals and to reduce the negative emotional and psychological effects of RS and WL there is need of ECCL, thus in this study, ECCL found to moderate positively between the relationship of WL and JP and also, ECCL moderate the negative mediated relationship of WL between RS and JP by unpacking the concept of affect theory of social exchange (Lawler, 2001, 2006), these findings support (Ozcelik & Barsade, 2018).The results of this study fully support the theorized moderation interaction between workplace loneliness, emotional culture of companionate love and job performance. It therefore extends full support to the theoretical model proposed in the study. Given these findings, this study is important in extending the literature on rejection sensitivity, workplace loneliness, emotional culture of companionate love and job performance. The results of this study are in line with the other studies done by (Barsade & O'Neill, 2014; Downey & Feldman, 1996; Feldman & Downey, 1994; Ozcelik & Barsade, 2018; Özen & Güneri, 2018; Watson & Nesdale, 2012).

7. Theoretical and Managerial Implications

The study has many theoretical implications. It extends understanding the phenomenon of loneliness that is so common in organizations and which adversely affects job performance. It also adds knowledge that is specific to the relationship between rejection sensitivity, workplace loneliness, emotional culture of companionate love and job performance especially with the respect to the manufacturing sector of textile sector of Punjab, Pakistan. This research will contribute towards extant literature because it was carried out in a new work environment and new cultural context (Asian culture) of textile sector (manufacturing sector). This study contributed, to translate ECCL moderated the relationship of RS, WL and JP to prove the validity in order to understand the emotional attachment and fear of rejection in ambiguous environments (i.e. manufacturing context especially textile sector) where due to developing country context, this context and sector require higher yield.

The study also has managerial implications, i.e. managers at all levels need to cogitate rejection sensitivity of workers and workplace loneliness as organizational problems both for the organization and for employees. They attempt to tackle these as social phenomena because it further affects their job performance and which ultimately adversely affects organizational performance. Secondly, to minimize the adverse effects of rejection sensitivity and workplace loneliness the management of the organizations needs to create coworker and group support to the employees to meet their socio-emotional need of social connections (Aselage & Eisenberger, 2003; Rhoades & Eisenberger, 2002). It also provides guidelines to the managers in understanding the important role of workplace environment for reaping positive dividends in the form of socially well integrated workforce. Managers may also work on arranging psychotherapeutic intervention for those employees who are prone to rejection sensitivity.

8. Conclusion

This research is the first of its kind that examines the relationship of rejection sensitivity with job performance mediated by workplace loneliness and moderated by ECCLin the eastern context especially to the manufacturing sector of Textile sector of Faisalabad, Punjab, Pakistan. The findings of this study indicate that those workers who are sensitive to rejection feel lonely at workplace, thus affecting their job performance. The support of companionate love in the workplace environment can however, compensate for this loneliness because these peoples are touchy and they lack the ability to resolve their emotional difficulties. Policies to care for lonely workers and development of culture of companionate love may reduce their loneliness, thus improving job performance which will help in realizing organizational objectives.

REFERENCES

Amarat, M., Akbolat, M., Ünal, Ö., & Güneş Karakaya, B. (2019). The mediating role of work alienation in the effect of workplace loneliness on nurses' performance. *Journal of nursing management*, *27*(3), 553-559.

Anand, P., ., & Mishra, S. K. (2019). Linking core self-evaluation and emotional exhaustion with workplace loneliness: does high LMX make the consequence worse? *The International Journal of Human Resource Management*, 1-26 [Early Online].

Aselage, J., & Eisenberger, R. (2003). Perceived organizational support and psychological contracts: A theoretical integration. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 24*(5), 491-509.

Ay, F. A. (2015). The Relationships Between Abusive Management, Workplace Loneliness and Organizational Cynicism: A Study for Health Professionals. . *The Journal of International Social Research, 41*, 1116-1126.

Barsade, S. G., & O'Neill, O. A. (2014). What's love got to do with it? A longitudinal study of the culture of companionate love and employee and client outcomes in a long-term care setting. *Administrative Science Quarterly, 59*(4), 551-598.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497-529.

Borman, W. C., & Motowidlo, S. J. 1993. Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, W. C. Borman, & Associates (Eds.), Personnel selection in organizations: 71–98. San Francisco, CA: Jossey-Bass.

Borman, & Motowidlo. (1997). Task Performance and Contextual Performance: The Meaning for Personnel Selection Research. *Human Performance, 10*(2), 99-109.

Bowlby. (1969). Attachment and loss: Vol. 1. Attachment. (pp. 1-401). London: The Hogarth Press and the Institute of Psycho-Analysis.

Bowlby. (1973). Attachment and loss. Vol. II: Sepration—anxiety and anger. New York: Basic Books.

Brown, S., Mitechll, S. M., Roush, J. F., Rosa, N. L. L., & Cukrowicz, K. C. (2019). Rejection sensitivity and suicide ideation among psychiatric inpatients: An integration of two theoretical models. *Psychiatry Research, 272*, 54-60.

Buchanana, G., & Seligman, M. E. P. (1995). *Explanatory style*. Hills dale, NJ: Lawrence Erlbaum Associates.

Buhs, E. S., & Ladd, G. W. (2001). Peer rejection as antecedent of young children's school adjustment: An examination of mediating processes. *Developmental Psychology, 37*(4), 550-560.

Cacioppo, J. T., & Hawkley, L. C. (2009). Perceived social isolation and cognition. *Trends in Cognitive Sciences, 13*(10), 447-454.

Cacioppo, J. T., Hughes, M. E., Waite, L. J., Hawkley, L. C., & Thisted, R. A. (2006). Loneliness as a specific risk factor for depressive symptoms: cross-sectional and longitudinal analyses. *Psychology and Aging, 21*(1), 140-151.

Cacioppo, J. T., & Patrick, W. (2008). *Loneliness: Human nature and the need for social connection*: WW Norton & Company.

Cao, Q., & Liang, Y. (2017). Perceived social support and life satisfaction in drug addicts: Self-esteem and loneliness as mediators. *Journal of Health Psychology*, [First Published November 27, 2017].

Chakraborty, S., & Chakravarti, S. (2019). Teamwork of temporary employees: multiple perspectives. *Human Resource Management International Digest, 27*(1), 11-14.

Chang, E. C. (2017). Perfectionism and loneliness as predictors of depressive and anxious symptoms in African American adults: Further evidence for a top-down additive model. *Cognitive Therapy and Research, 41*, 720-729.

Chen, X., Peng, J., Lei, X., & Zou, Y. (2019). Leave or stay with a lonely leader? An investigation into whether, why, and when leader workplace loneliness increases team turnover intentions. *Asian Business & Management*, 1-24 [First Online: 11 July 2019].

Cohen-Mansfield, J., & Eisner, R. (2019). The meanings of loneliness for older persons. *Aging & Mental Health*, 1-11 [Early Online].

Coplan, R. J., Closson, L. M., & Arbeau, K. A. (2007). Gender differences in the behavioral associates of loneliness and social dissatisfaction in kindergarten. *Journal of Child Psychology and Psychiatry, 48*(10), 988-995.

Dodge, K. A., Lansford, J. E., Burks, V. S., Bates, J. E., Pettit, G. S., Fontaine, R., & Price, J. M. (2003). Peer rejection and social information-processing factors in the development of aggressive behavior problems in children. *Child Development, 74*(2), 374-393.

Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology, 70*(6), 1327-1343.

Downey, G., Freitas, A. L., Michaelis, B., & Khouri, H. (1998). The self-fulfilling prophecy in close relationships: Rejection sensitivity and rejection by romantic partners. *Journal of Personality and Social Psychology, 75*(2), 545-560.

Dussault, M., & Thibodeau, S. (1997). Professional isolation and performance at work of school principals. *Journal of School Leadership, 7*, 521-536.

El-Sabaa, S., . (2001). The skills and career path of an effective project manager. *International Journal of Project Management, 19*(1), 1-7.

Erdil, O., & Ertosun, Ö. G. (2011). he Relationship between Social Climate and Loneliness in the Workplace and Effects on Employee Well-Being. *Procedia—Social and Behavioral Sciences, 24*, 505-525.

Erikson, E. H. (1963). *Childhood and Society*. New York: W.W Norton and Company.

Feldman, S., & Downey, G. (1994). Rejection sensitivity as a mediator of the impact of childhood exposure to family violence on adult attachment behavior. *Development and Psychopathology, 6*(1), 231-247.

Fogaça, N., Rego, M. C. B., Melo, M. C. C., Armond, L. P., & Coelho Jr, F. A. (2018). Job performance analysis: Scientific studies in the main journals of management and psychology from 2006 to 2015. *Performance Improvement Quarterly, 30*(4), 231-247.

Fontana, A., De Panfilis, C., Casini, E., Preti, E., Richetin, J., & Ammaniti, M. (2018). Rejection sensitivity and psychopathology symptoms in early adolescence: The moderating role of personality organization. *Journal of Adolescence, 67*, 45-54.

Gonzaga, G. C., Keltner, D., Londahl, A. E., & Smith, M. D. (2001). Love and the commitment problem in romantic relations and friendship. . *Journal of Personality and Social Psychology, 81*, 247-262.

Guo, Q., Cai, M., Wang, F., & Li, Y. (2017). The influences of wording direction on the measurement of loneliness. . *Chinese Journal of Clinical Psychology, 25*, 116-119.

Hatfield, E., Nerenz, D., Greenberger, D., Lambert, P., & Sprecher, S. (1982). *Passionate and companionate love in newlywed couples*. University of Wisconsin, Madison, WI, USA. [ONLINE] Available: http://www.elainehatfield.com/60.pdf (March 29th, 2019).

Hawkley, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine, 40*(2), 218-227.

Hoppock, R. (1957). A Thoery of Occupational Choice. *Vocational Guidance Quarterly, 5*(4), 152-152.

Horney, K. (1937). *The neurotic personality of our time*. New York: Norton.

Jaremka, L. M., Fagundes, C. P., Peng , J., Bennett, J. M., Glaser, R., & Malarkey, W. B. (2013). Loneliness promotes inflammation during acute stress. *Psychological Science, 24*, 1089-1097.

Jeong, E. J., Kim, D. J., Lee, D. M., & Lee, H. R. (2016). *A study of digital game addiction from aggression, loneliness and depression perspectives.* Paper presented at the 49th Hawaii International Conference on System Sciences (HICSS 2016), Hawaii, United States. [ONLINE] Available https://pdfs.semanticscholar.org/bddd/c24dc1ff35a291833c5f15a25a8cc576c234.pdf (April 13th, 2019).

Kane, J. S., & Lawler, E. E. (1979). Performance appraisal effectiveness: Its assessment and determinants *Research in Organizational Behavior* (B. Staw (Ed.) ed., Vol. 1). Greenwich, Conn.: JAI Press.

Katz, D., & Kahn, R. L. (1978). *The Social Psychology of Organizations* (Vol. 2). New York, NY, USA: Wiley.

Keltner, D., & Gross, J. J. (1999). Functional accounts of emotions. *Cognition and Emotion, 13*, 467-480.

Keltner, D., & Haidt, J. (1999). Social functions of emotions at four levels of analysis. *Cognition and Emotion, 13*, 505-521.

Keser, A., & Karaduman, M. (2014). Business Life Loneliness Perception of Organizational Citizenship Behavior Research on Relationships with Teachers. . *Journal of International Labor and Society, 3*, 178-197.

Kong, F., & You, X. (2013). Loneliness and self-esteem as mediators between social support and life satisfaction in late adolescence. *Social Indicators Research, 110*(1), 271-279.

Lam, L. W., & Lau, D. C. (2012). Feeling lonely at work: investigating the consequences of unsatisfactory workplace relationships. *The International Journal of Human Resource Management, 23*(20), 4265-4282.

Lawler. (2001). An affect theory of social exchange. *American Journal of Sociology, 107*(2), 321-352.

Lawler. (2006). The affect theory of social exchange *Contemporary social psychological theories* (In P. J. Burke (Ed.) ed., pp. 244-267). Stanford, CA: Stanford University Press.

Lilius, J. M., Worline, M. C., Dutton, J. E., Kanov, J. M., & Maitlis, S. (2011). Understanding compassion capability. *Human Relations, 64*(7), 873-899.

London, B., Downey, G., Bonica, C., & Paltin, I. (2007). Social causes and consequences of rejection sensitivity. *Journal of Research on Adolescence, 17*(3), 481-506.

Luo, Y., Hawkley, L. C., Waite, L. J., & Cacioppo, J. T. (2012). Loneliness, health, and mortality in old age: A national longitudinal study. *Social Science and Medicine, 74*, 907-914.

Morgan, T., Wiles, J., Moeke-Maxwell, T., Black, S., Park, H., Dewes, O., Gott, M. (2019). People haven't got that close connection: meanings of loneliness and social isolation to culturally diverse older people. *Aging & Mental Health*, 1-9 [Early Online].

O'Reilly, C. A., & Chatman, J. A. (1996). Culture as social control: Corporations, cults, and commitment. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews, Vol. 18* (p. 157–200). Elsevier Science/JAI Press.

Ozcelik, H., & Barsade, S. G. (2018). No employee an island: Workplace loneliness and job performance. *Academy of Management Journal, 61*(6), 2343-2366.

Özen, D. Ş., & Güneri, F. K. (2018). Basic Determinant of Success of Interpersonal Relationship: Rejection Sensitivity. *Psikiyatride Guncel Yaklasimlar, 10*(4), 444-459.

Parker, J. G., & Asher, S. R. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? *Psychological Bulletin, 102*(3), 357-389.

Parkinson, B., Fischer, A. H., & Manstead, A. S. (2005). *Emotion in social relations: Cultural, group, and interpersonal processes*: Psychology Press.

Peng, J., Chen, Y., Xia, Y., & Ran, Y. (2017). Workplace loneliness, leader-member exchange and creativity: The cross-level moderating role of leader compassion. *Personality and Individual Differences, 104*, 510-515.

Preacher, K. J., & Hayes, A. F. (2005). Asymptotic and resampling strategies for assessing and comparing indirect effects in simple and multiple mediator models. *Manuscript submitted for publication*.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*(3), 879-891.

Reis, H. T., & Aron, A. (2008). Love: What is it, why does it matter, and how does it operate? *Perspectives on Psychological Science, 3*(1), 80-86.

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*(4), 698-714.

Richeson, J. A., & Trawalter, S. (2005). Why do interracial interactions impair executive function? A resource depletion account. *Journal of Personality and Social Psychology, 88*(6), 934.

Riva, G., & Galimberti, C. (1998). Computer-mediated communication: identity and social interaction in an electronic environment. *Genetic Social and General Psychology Monographs, 124*(4), 434-464.

Robinson, M. D., Watkins, E. R., & Harmon-Jones, E. (2013). *Handbook of cognition and emotion*: Guilford Press.

Rogers, C. R. (1959). *A theory of therapy, personality, and interpersonal relationships: As developed in the client-centered framework* (Vol. 3): McGraw-Hill New York.

Romero-Canyas, R., Downey, G., Berenson, K., Ayduk, O., & Kang, N. J. (2010). Rejection sensitivity and the rejection–hostility link in romantic relationships. *Journal of Personality, 78*(1), 119-148.

Rook, K. S. (1984). Research on social support, loneliness, and social isolation: toward an integration. *Review of Personality and Social Psychology, 5*, 239-264.

Sanduleac, S., ., & Mariniuc, N., . (2018). The relationsip between Workplace Loneliness and Communication in IT Employees. *Psihologie Revistă Ştiinţifico, 33*, 72-83.

Shapiro, J. R., Baldwin, M., Williams, A. M., & Trawalter, S. (2011). The company you keep: Fear of rejection in intergroup interaction. *Journal of Experimental Social Psychology, 47*(1), 221-227.

Shelton, J. N., & Richeson, J. A. (2005). Intergroup contact and pluralistic ignorance. *Journal of Personality and Social Psychology, 88*(1), 91-107.

Shelton, J. N., Richeson, J. A., & Bergsieker, H. B. (2009). Interracial friendship development and attributional biases. *Journal of Social and Personal Relationships, 26*(2-3), 179-193.

Shuling Gao, Mark Assink, Tinting Liu, Chan, K. L., & Ip, a. P. (2019). Associations Between Rejection Sensitivity,Aggression, and Victimization: A Meta-Analytic Review. *Trauma, Violence & Abuse, 20*(10), 1-11.

Sonnentag, S., & Frese, M. (2002). Performance concepts and performance theory. *Psychological management of individual performance, 23*(1), 3-25.

Soo Ting T'ng , Khee Hoong Ho, Da En Sim, Cher Hoe Yu, & Wong, P. Y. (2019). The mediating effect of Internet gaming disorder's symptoms on loneliness and aggression among undergraduate students and working adults in Malaysia. *PsyCh Journal*, 1-12 [Early Online].

Sullivan, H. S. (1937). A note on the implications of psychiatry, the study of interpersonal relations, for investigations in the social sciences. *American Journal of Sociology, 42*(6), 848-861.

Tabancali, E. (2016). The relationship between teachers' job satisfaction and loneliness at the workplace. *Eurasian Journal of Educational Research, 16*, 263-280.

Tang, & Richardson. (2013). Reversing the negative psychological squelae of eclusion: Inclusion is ameliorative but not protective against the aversive consequences of exclusion. *Emotion, 13*, 139-150.

Teo, A. R., Marsh, H., Forsberg, C. W., Nicolaidis, C., Chen, J. I., Newsom, J., & Dobscha, S. K. (2018). Loneliness is closely associated with depression outcomes and suicidal ideation among military veterans in primary care. *Journal of Affective Disorders, 230*, 42-49.

Theeke, L. A. (2009). Predictors of loneliness in U.S. adults over age sixty-fve. *Archives of Psychiatric Nursing, 23*, 387-396.

Tılfarlıoğlua, F. Y., & Eklerb, T. (2019). The Effects of the Fear of Success and Rejection Sensitivity on Learning English. *Academy Journal of Educational Sciences, 3*(1), 28-41.

Trawalter, S., & Richeson, J. A. (2008). Let's talk about race, baby! When Whites' and Blacks' interracial contact experiences diverge. *Journal of Experimental Social Psychology*, *44*(4), 1214-1217.

Trawalter, S., Richeson, J. A., & Shelton, J. N. (2009). Predicting behavior during interracial interactions: A stress and coping approach. *Personality and Social Psychology Review*, *13*(4), 243-268.

Vorauer, & Sakamoto. (2006). I though we could be friends, but...: Systematic miscommunication and defensive distancing as obstacles to cross-group friendship formation. . *Psychological Science, 17*, 326-331.

Wang, W., Lie, J., Sun, G., , Zhang, X., & Cheng, Z. (2016). The Costs to Life Satisfaction of Impression Management: The Sense of Control and Loneliness as Mediators, Munich Personal RePEc [ONLINE] Available: https://mpra.ub.uni-muenchen.de/72912/ (November 04th, 2019).

Watson, J., & Nesdale, D. (2012). Rejection Sensitivity, Social Withdrawal, and Loneliness in Young Adults. *Journal of Applied Social Psychology, 42*(8), 1984-2005.

Welbourne, T. M., Johnson, D. E., & Erez, A. (1998). The role-based performance scale: Validity analysis of a theory-based measure. *Academy of Management Journal, 41*(5), 540-555.

Wilson, R. S., Krueger, K. R., Arnold, S. E., Schneider, J. A., Kelley, J. F., Barnes, L. L., Bennett, D. A. (2007). Loneliness and risk of Alzheimer disease. *Archives of General Psychiatry, 64*, 234-240.

Wright-St Clair, V., Neville, S., Forsyth, V., White, L., & Napier, S. (2017). ntegrative review of older adult loneliness and social isolation in New Zealand. *Australasian Journal on Ageing, 36*(2), 114-123.

Wright, S. L. (2005). Organizational Climate, Social Support and Loneliness in the Workplace. *Research on Emotion in Organizations, 1*, 123-142.

Wright, S. L. (2012). Is it lonely at the top? An empirical study of managers and nonmanagers' loneliness in organizations. *The Journal of Psychology: Interdisciplinary and Applied, 146*(1-2), 47-60.

Wright, S. L., Burt, C. D. B., & Strongman, K. T. (2006). Loneliness in the workplace: Construct definition and scale development. *New Zealand Journal of Psychology, 35*, 59-68.

Yujia, R., Jiao, Y., & Liqiong, L. (2017). Social anxiety and internet addiction among rural left-behind children: the mediating effect of loneliness. *Iranian journal of public health, 46*(12), 1659-1668.

Zhou, J., Li, X., Tian, L., & Huebner, E. S. (2018). Longitudinal association between low self-esteem and depression in early adolescents: The role of rejection sensitivity and loneliness. *Psychology and Psychotherapy: Theory, Research and Practice*, [in Press]. doi: 10.1111/papt.12207