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Development and Validation of a Novel Resilience Scale for Nursing Professionals: An Exploratory and Confirmatory Factor Analysis Approach

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Abstract

Psychological research has shown a significant interest in the concept of resilience and defined it as the capacity to adapt and thrive in the face of adversity. Despite its importance, the measurement of resilience remains inconsistent across studies specifically in Asian countries, necessitating the development of a reliable and valid scale. The purpose of this work is to apply exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to the development and validation of a novel resilience scale. Initially, a comprehensive literature review and expert consultations were conducted to generate an item pool reflecting various dimensions of resilience. This study's data analysis is divided into two distinct but connected sections. Study 1 focuses on the development of the Resilience scale and EFA was employed on data collected from a diverse sample to identify the underlying factor structure. The resultant model was then subjected to CFA in Study 2 using a separate validation sample to confirm the factor structure and assess the scale's psychometric properties. The final scale demonstrated robust reliability and validity, offering a comprehensive tool for measuring resilience across different populations. This novel scale is expected to facilitate future research and interventions aimed at understanding and enhancing resilience.

Keywords: Resilience, Nursing Professionals, Exploratory Factor Analysis, Confirmatory Factor analysis, Scale Development

Introduction

The literature has shown that resilience is a crucial personality trait that protects nursing professionals from stress and adversity and enables them to handle problems at work while preserving their "mental well-being" and "psychological health" (Turner, 2015; Bloom, Black, & Rappuoli, 2017; Kim & Park, 2017; Labrague, Hammad, et al., 2018). Resilience is an individual's capability to "bounce back" or recuperates swiftly from a stressful situation (Hart, Brannan, & DeChesnay, 2014). Numerous research have demonstrated the protective function of resilience during stressful events experienced by nursing workers (Turner, 2015; Labrague, Hammad, et al., 2018). In addition to its protective function, resilience has been found to be a component that enhances nursing practitioners' sense of fulfilment. Brown et al., 2018; Judkins & Rind, 2005;

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Larrabee et al., 2010; Zheng et al., 2017 reported that resilience and job satisfaction are positively associated to each other.

Resilience have been identified as an important personality trait that may affect the response of nursing professionals towards difficult situations at work settings. Resilience has been identified as a multifactorial concept that may follow an adaptive and evolutionary process. Despite, the paucity of literature, resilience has been acknowledged as one of the significant factors in the field of Nursing. Building resilience among nurses is assumed to be a way to support and retain nurses in the profession (Hart et al. 2014). Literature on resilience among nurses concluded that nurses with high level of resilience possess protective factors; "*it mediates their stress levels*" (Park et al. 2017), "*reduces their experience of burnout*" (Garcia & Calvo 2012) and "*increases their satisfaction levels with their job"* (Matos et al. 2010). Understanding resilience among nursing professionals can presciently assist nurses recognize and avoid potential difficulties and crisis situation, hence nurturing job resources and achievement of one's individual and professional goals. Increased resilience among nursing professionals can aid in a significant reduction in situations of *"emotional exhaustion", "increase work engagement",* & *"enhance function"* while witnessing adversities and challenges at work. Nursing professionals can formulate strategies to confront difficult situations, adversity and moderate the impact of factors of job demand. Further exploration is required in the field of nurse resilience to aid in development of a consistent and valid instrument for measuring resilience among nursing professionals within various clinical settings (Fiona et al., 2019).

Review of Literature

Previous researches gave contrasting evidence that job-related factors like stress, burnout and resilience are significantly related. Abdollahi et al., (2014a), Abdollahi et al. (2014b) and Hernandez et al., (2016) affirmed that there is a negative relationship between stress and resilience at work. Ding et al. (2015) concluded that there is a negative correlation between burnout and resilience whereas there is a positive association between *"coping skills"; "self-efficacy"* and *"resilience".* Interestingly, Gillespie et al. (2007) stressed that there is no statistically significant relationship between "*social support*" and *"resilience"*. Contrastingly, the researches done by Hsieh et al. (2017), Hsieh et al. (2016) and Hsieh, Chen, Wang, Chang, and Ma (2016) emphasised that there exists a significant association between social support and resilience. Similar results were reported by research conducted by "Russo et al. (2018)" and "Wang et al. (2017)" where the study inveterate that social support and resilience are positively correlated with each other. Furthermore, Mealer et al. (2012) confirmed that there is a negative association between "*resilience"* and *"burnout"; "anxiety/depression"; and "posttraumatic stress disorder"(PTSD)*. Mealer et al. (2017) further concluded that posttraumatic stress disorder (PTSD) is directly and significantly influenced level of resilience. Two other studies (Yu & Lee, 2018; Rushton et al., 2015) also point out that stress and burnout have a negative association with resilience. Researchers like Brown et al., 2018; Zheng et al., 2017; Larrabee et al., 2010; Judkins & Rind, 2005 revealed in their studies that nursing professionals who possess higher level of resilience portray higher level of job satisfaction as compared to nursing professionals who possess lower level of resilience. Moloney, Boxall, Parsons, & Cheung, (2018) emphasized the role

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of Nurse resilience in boosting work engagement at work that promotes an increased level of job satisfaction and leads to retention of nursing professionals, consequently enabling and nurturing a healthy nursing workforce. The study conducted by Gillespie et al. (2009) highlighted the need to identify other predictors of resilience among nursing professionals. Matos et al. (2010) acknowledged the complexity and multidimensionality associated with the concept of Resilience. The study reported a statistically significant association between resilience level and level of job satisfaction in nursing professionals working with psychiatric department. The study focussed on development and implementation of nurse retention programs to enhance resilience among nurses. Rushton et al. (2015) emphasized on building a healthy and nurturing work environment for nursing professionals by enhancing resilience among them. The study statistical analysed the association between burnout, moral distress and resilience among nurses and reported a strong relationship between the variables. The study also highlighted the role of resilience in managing and reducing emotional exhaustion and stress among nurses. Zou et al. (2016) examined the association between *resilience, burnout and psychological distress* among nurses in china and revealed that resilience has an inverse relationship with psychological distress and burnout. The study also highlighted that resilience emerged as a mediator between burnout and psychological distress. Zheng et al. (2017) explored the association and interdependence of resilience and job satisfaction and reported a statistically significant relationship between the two. The study emphasized that strengthening and enhancing resilience can upsurge the degree of job satisfaction among nursing professionals. Lanz J. and Bruk-Lee V. (2017) reported that resilience affected the immensity in result of conflict on job outcomes and emphasized on further exploration of the role that resilience plays in reducing the impact of stressors. Babanataj et al. (2018) investigated the effect of Resilience training on occupational stress experienced by critical care unit nursing professionals in Iran. The study used a pre and post-test approach using resilience training as an intervention and reported that training intervention significantly elevated the resilience level and reduced the degree of occupational stress among nursing professionals. The study further proposes that hospital administration can utilize intervention of resilience training to reduce occupational stress.

Inconsistent results have been reported across studies regarding the factors associated with resilience. Literature reveals multiple and contrasting results in terms of Resilience among nursing professionals and its relationship with variables like Role Stress and Job Satisfaction. Additionally, there is a dearth of studies on resilience among Indian Nursing Professionals. Hence, further exploration is needed to understand the association and relationship of Resilience with other organisational variables and between various demographic variables.

Methodology

This study's data analysis is divided into two distinct but connected sections. Exploratory Factor Analysis (EFA) was were performed to explore the factor structure of Resilience in the first section. The authors adhered to the accepted practices for scale development that have been suggested by the literature (e.g., DeVellis, 2016; Hair et al., 2010). Confirmatory Factor Analysis (CFA) was conducted in the second part of the study using a separate validation sample to confirm the factor structure and assess the scale's psychometric properties.

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Measuring Resilience

Connor–Davidson Resilience Scale (2003) and Resilience Scale for Adults (Friborg et al., 2003; Friborg et al., 2009) are the most widely used instruments in previous studies and Resilience Scale (Wagnild & Young, 1993) is the best instrument that possess psychometric properties necessary to investigate level of resilience in the different strata of ages including that of the adolescent population (N. R. Ahern et al., 2006) but the variability of factors affecting nursing professionals require a more robust and a reliable instrument to cover more aspects of nurse professional's workplace. The resilience scale for nurses developed and validated by Ihara H. et al., 2010 attempts to cover many facets of resilience among nurses in Japan and identified four major factors in their analyses viz *"Positivity in nursing", "Interpersonal skill", "Having an anchor in personal life",* and *"Response to novelty"*. However, the multidimensionality of the aspect of resilience, varied factors, inconsistent results from studies and its applicability to Indian scenario requires the development of a new instrument suitable for Indian nursing environment with drastically changing demographics in the nursing profession.

"According to McAllister and Lowe (2011), a resilient person is one who has not only overcome hardship but has also grown personally as a result of the experience. The authors of The Resilient Nurse argue that resilience is a critical competency that nurses must possess in order to make sense of their experiences and effectively control their responses to workplace pressures. Positive learning experiences can teach or improve protective factors applicable to nurses and nursing students, according to McAllister and Lowe (2011). In order to lessen the negative consequences of stress and misfortune on employees' life, they stressed that everyone should take the initiative to build resilience in the workplace.

Table 1: Factors leading to Resilience

S.no	Factors	Studies
1	Personal Competence	Connor Davidson resilience scale (2003); Mealer et al (2012); Hjemdal et al. (2006); Wagnild and Young (1993); Taorima et al (2015).; Ihara et al. (2010), Ryan et al. (2009)
2	Social Companionship	Wagnild and young (1993); Hejamdal et al. (2006); Ihara et al. (2010); Ryan et al. (2009)
3	Social Competence	Hejamdal et al. (2006); Ihara et al. (2010); Ryan et al. (2009), Mealer et al (2012)
4	Perseverance	Mealer et al. (2012); Hjemdal et al (2006).; Taorima et al. (2015); Wagnild and young (1993); Ihara et al. (2010)
5	Sanguinity	Wagnild and young (1993), Ihara et al. (2010)

Study 1 Construction of Resilience Scale for Nurses

A deductive approach recommended by Hinkin (1998) was used for generation of survey items. The review of literature set the preliminary premise with the identification of factors leading to resilience as explained in previous section. All 29 items under 5 subscales were diligently

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examined and evaluated to avoid any confusing or ambiguous questions; leading or loading questions; superfluous questions and misplaced modifiers. Few statements were reworded and modified with respect to language for enhancing the understandability among Indian respondents. The aim of further editions was to make the questionnaire more respondent friendly so that in depth realities about the characteristic of resilience can be attained. Table 2 shows the factors and survey items adapted from literature that are predicted to load on respective factors.

Table 2 : Factors and survey items for the construct Resilience

Variable	Adapted from	Items
Personal competence	Mealer et al (2012)	I am competent to accomplish my goals
		I feel confident to handle difficult situation well
		Past experience equips me to handle new challenges
		I can manage critical situations at work
		I welcome challenges as they always enhance my professional knowledge
		I usually find what's best for me in one way or another
Social Competence	Hejamdal et al. (2006) and Ihara et al. (2010)	I can easily befriend people
		I find it easy to start a conversation with people at work
		I am able to adjust well with incompatible seniors and colleagues
		I help new entrants at my workplace
		I can make the conversation humorous for everyone
		I get along with people having different personalities
Social Companionship	Hejamdal et al. (2006) and Ihara et al. (2010)	I share a strong bond with my friends/family
		I share a common belief in my family towards what's important in life
		During difficult times, my family/friends stand together
		I have friends/family who believe in my abilities
		My friends/family always encourage me to do well
		My friends/family care about me and always listen to resolve my problems
		I am blessed with mentors who have helped me in my professional growth
		At professional front, I always get support and guidance from my seniors/collegues
Perseverance	Taorima et al. (2015); and Wagnild and young (1993)	I always give my best effort despite difficulties
		I make persistent endeavours to nurture my nursing profession
		I am determined to achieve my planned goals with persistent efforts

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		In times of hardships, I remain optimistic and work towards achievement of my goals
		While facing death and dying situations at work, I continue to stay focused on my work
Sanguinity	Ihara et al. (2010)	I am able to find happiness in small things
		I am optimistic that good things will happen in Future
		I belive that I will do well in my career
		I feel in control of my future

Content Validity- To assess the content validity of the items, subject experts were consulted for qualitative feedback on the items. For this purpose, 2 experts from the field of nursing studies, 4 Nursing professionals in active service and 3 experts from the field of statistical research were consulted. The feedback was extremely helpful to the researcher in enhancing clarity, comprehensiveness, readability and understandability of the items. The items on which at least 6 experts mentioned their consensus, were retained in the study. Few of the items were reworded on the recommendation of the subject experts. Finally, 29 items were retained and the instrument was used in the study for further refinement and usage. The measurement instrument for Resilience is a structured, closed ended scale measured on a 5 point Likert type scale from Strongly Disagree (1) to Strongly Agree (5).

Participants of Study 1

A convenience sample of 332 Nursing Professionals (268 females and 64 males; mean age= 37.2 years) was recruited for this study and completed the preliminary version of the Resilience scale.

Results

Exploratory Factor Analysis of Resilience among Nurses

The "Kaiser-Meyer-Olkin" statistic confirmed the sampling adequacy for the "Exploratory Factor Analysis" to be conducted for the construct of Role Stress, KMO = 0.928 which is marvellous and is well above the acceptable limit of 0.5 (Field, 2009; Kaiser, 1974) χ^2 = 6768.297, df = 378, "p <0.001", indicated that correlation between items was sufficiently large for PCA (Hair et al, 2010) (Refer Table 3).

Table 3: KMO and Bartlett's Test – Resilience

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.928
Bartlett's Test of Sphericity	Approx. Chi-Square	6768.297
	Df	378
	Sig.	0.000

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Factor 1 accounts for 43.158% of the variance and other factors as 8.898%, 7.237%, and 6.048%. Maximum variance is explained by the first factor and thereafter, the amount of variance reduces for each factor (Tabachnick and Fidell, 2001). The four factors collectively accounted for 65.340% of the total variance.

The reliability test exhibited satisfactory levels of internal consistency. The estimated "Cronbach alpha" values were well above the suggested value of 0.70 (Nunnally, 1978). Accordingly, the extracted factors were named and used for further analysis. After interpreting the factor structure, the analysis postulates that most of the factors loaded as per the literature except the factor of Perseverance that got merged the factor of Sanguinity. Therefore, this offers credibility to the constructs that were identified to formulate the factor structure. The factors obtained are in:

Factor1- Sanguinity
Factor2- Personal Competence
Factor3- Social Companionship
Factor4- Social Competence

After successful conduct of Factor analysis, following factor structure was obtained, individual factor loading of items is depicted in Tables 4 below:

Table 4: Factor structure of Resilience

S.No.		Variables	Factor Loading
1	Sanguinity (SAN)	I always give my best effort despite difficulties	0.63
2		I make persistent endeavours to nurture my nursing profession	0.68
3		I am determined to achieve my planned goals with persistent efforts	0.74
4		In times of hardships, I remain optimistic and work towards achievement of my goals	0.73
5		While facing death and dying situations at work, I continue to stay focused on my work	0.66
6		I am able to find happiness in small things	0.71
7		I am optimistic that good things will happen in Future	0.76
8		I believe that I will do well in my career	0.7
9		I feel in control of my future	0.64
10	Personal Competence (PCT)	I am competent to accomplish my goals	0.75
11		I feel confident to handle the difficult situation well	0.81
12		Past experience equips me to handle new challenges	0.82
13		I can manage critical situations at work	0.84
14		I welcome challenges as they always enhance my professional knowledge	0.79
15		I usually find what's best for me in one way or another	0.75

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16		I help new entrants at my workplace	0.51
17	Social Companionship (SCP)	I share a strong bond with my friends/family	0.61
18		I share a common belief in my family towards what's important in life	0.68
19		During difficult times, my family/friends stand together	0.82
20		I have friends/family who believe in my abilities	0.82
21		My friends/family always encourage me to do well	0.78
22		My friends/family care about me and always listen to resolve my problems	0.81
23		I am blessed with mentors who have helped me in my professional growth	0.52
24	Social Competence (SCT)	I can easily befriend people	0.62
25		I find it easy to start a conversation with people at work	0.69
26		I am able to adjust well with incompatible seniors and colleagues	0.68
27		I can make the conversation humorous for everyone	0.7
28		I get along with people having different personalities	0.74

Study 2- Validation of Resilience scale for Nurses

First Order Confirmatory Factor Analysis of Resilience

The first order "Confirmatory Factor Analysis (CFA)" was performed for assessing the factor loading of the variables for four constructs representing the factors leading to Resilience among nursing professionals.

Participants of Study 2

A convenience sample of 312 Nursing Professionals (244 females and 68 males; mean age= 38.3 years) was recruited for this study and completed the preliminary version of the Resilience scale.

Results

The figure 1 indicates the Confirmatory Factor Analysis model of all the constructs related to Resilience. The standardised regression weight of each measured variable of the constructs is more than 0.50 (Appendix 1). The model represents correlation between the constructs and hence converge together to formulate a second order construct. The CFA model attains the convergent and discriminant validity and different factors are also correlated with each other. The results suggested deletion of several items due to factor loading less than 0.5. The model yielded a good fit with are CMIN/df=2.683, RMR= 0.044, GFI=0.839, AGFI=0.804, TLI=0.904, CFI=0.915, NFI=0.872 and RMSEA= 0.071 (Table 5). The five-factor model has 28 items in total and the model exhibit good composite reliability with values greater than or equal to 0.7 (Fornell and Larcker,1981). The "average variance extracted (AVE)" of all five constructs were higher than the desired value of 0.50. The Convergent validity of the model is established as "CR>0.7, AVE>0.5 and CR>AVE" (Table 6)

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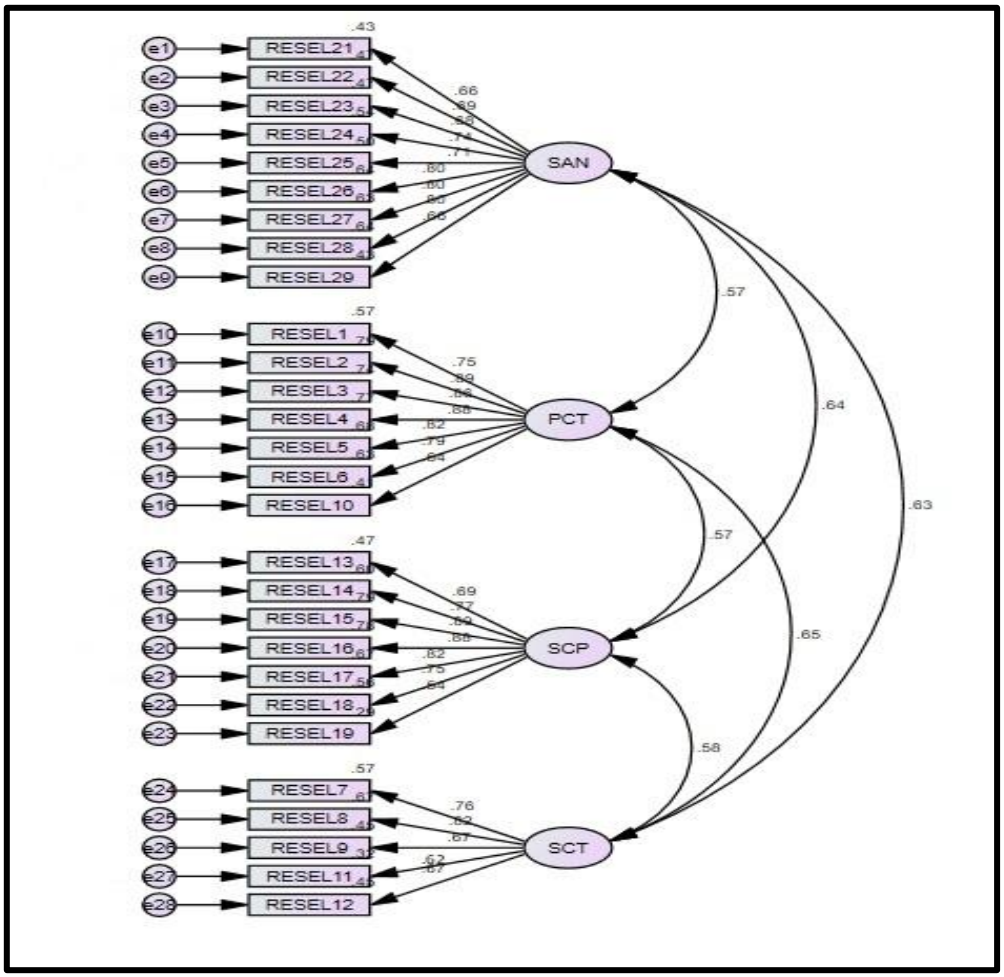

Figure 1: *First Order CFA: Resilience*

Table 5: CFA First Order Model Fit Indices – Resilience

χ^2	CMIN/df	GFI	AGFI	NFI	CFI	TLI	RMSEA	RMR
893.43	2.683	0.839	0.804	0.872	0.915	0.904	0.071	0.044

The model fit summary of Structural Equation Modelling indicate that the model is fit as CFI value is significantly high as supported by other model fit statistics. The model fit indices are shown in Table 5

Table 6: CFA First Order Reliability and Validity Statistic – Resilience

Factor	Alpha	CR	AVE
Factor 1- Sanguinity	0.912	0.91	0.529
Factor 2- Personal Competence	0.927	0.929	0.653
Factor 3- Social Companionship	0.907	0.91	0.596
Factor 4-Social Competence	0.836	0.834	0.504

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Second Order Confirmatory Factor Analysis of Resilience

The four factors were found to be intercorrelated (0.57,0.64,0.63,0.57,0.65,0.58) and the value of correlations is lower than the threshold of 0.80 to be contemplated as a single factor (Kline, 2005). It represented that these four factors will converge to form a higher-order construct. The convergent validity and other model fit indices of the model were evaluated to ensure whether the four dimensions are loading well onto the higher-order construct of Resilience. Second-order CFA was run and the results depicted that the model (Figure 2) possesses a good fit with CMIN/df=2.846, RMR= 0.045, GFI=0.833, AGFI=0.801, TLI=0.894, CFI=0.905, NFI=0.862 and RMSEA= 0.075 (Table 7).

The resilience model consisting of four measured factors, namely Sanguinity, Personal Competence, Social Companionship and Social Competence was measured from four indicators each. The standard regression weights of all measured variables were higher than 0.5 and significant at the alpha level of 0.05 (Appendix 1). The model showed acceptable levels of composite reliabilities. The model exhibited acceptable levels of composite reliabilities. The basic thumb rule regarding composite reliability was suggested by Fornell and Larcker (1981) as a value equal to or greater than 0.7 is good. The "average variance extracted (AVE)" of constructs was higher than the suggested value of .50. The Convergent validity of the model is established as "CR>0.7, AVE>0.5, and CR>AVE" (Pinto et al, 2014) Table 8.

Table 7: CFA Second Order Model Fit Indices – Resilience

$\chi 2$	CMIN/df	GFI	AGFI	NFI	CFI	TLI	RMSEA	RMR
964.73	2.846	0.833	0.801	0.862	0.905	0.894	0.075	0.045

Table 8: CFA Second Order Reliability and Validity Statistic – Resilience

Factor	Alpha	CR	AVE
Factor 1- Sanguinity	0.912	0.888	0.523
Factor 2- Personal Competence	0.927	0.93	0.658
Factor 3- Social Companionship	0.907	0.908	0.591
Factor 4-Social Competence	0.836	0.834	0.504

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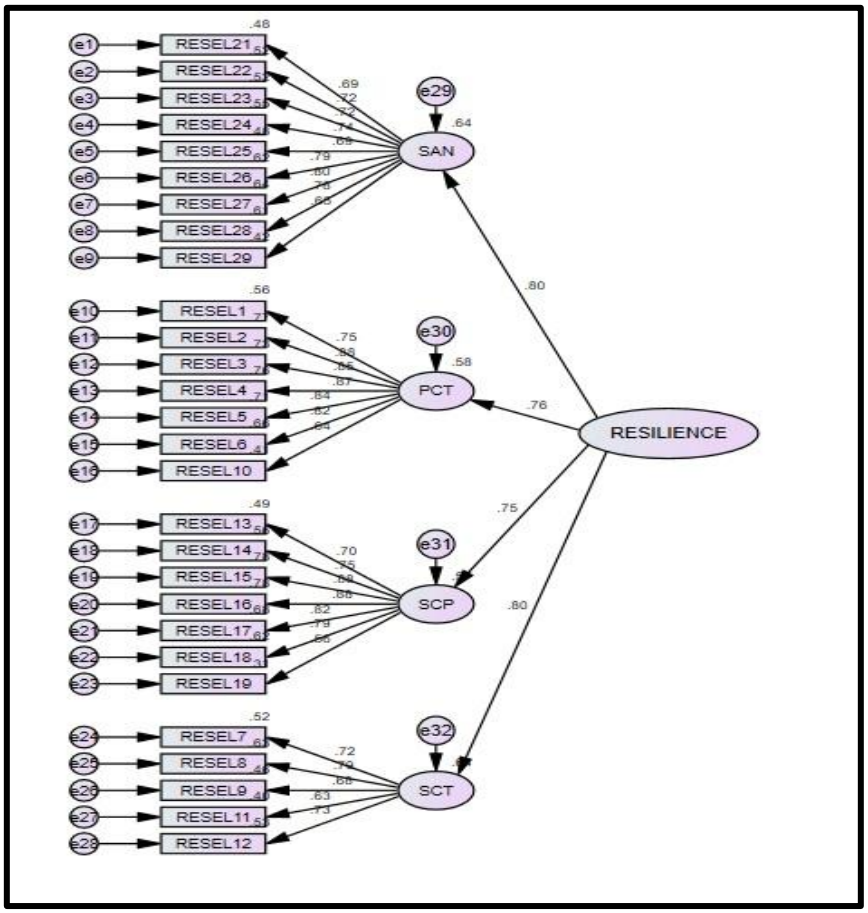

Figure 2: *Second Order CFA: Resilience*

Major highlights of EFA and CFA

The first factor assessed displayed loadings from two constructs viz. Perseverance and Positive Mental aptitude. This factor was named *Sanguinity* and reported positive significant loading greater than 0.50. Further, nine statements utilized for measuring each of the variables of perseverance and positive mental aptitude represented a positive significant loading with values greater than 0.60. Other loaded factor identified while performing Exploratory Factor Analysis was *Personal Competence*. Each of the seven statements used to measure *Personal Competence* very well formulated the factor structure and displayed no case of cross-loading. The third factor identified was *Social Companionship*, with 7 statements having an eigenvalue of more than 0.50 further formulating the dimensionality of the factor. The fourth factor identified was *Social Competence*, all five questions which intended to measure *Social competence*, displayed credibility with an eigenvalue more than 0.60.

After identification of the predictors of *Resilience,* the emanating phenomenon was to evolve a structural model where the relationship among the drivers was investigated. The result established that the drivers identified during EFA and CFA could predict Resilience. Subsequently, "structural equation modelling (SEM)" was employed to investigate the aforesaid relationship. First-order "Confirmatory factor analysis" was performed to assess the correlation among four

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explored factors of *Resilience*. All the four factors were found to be intercorrelated and presented convergence to form a higher-order construct hence, second-order Confirmatory Factor Analysis was performed and the results displayed reliability and validity of the scale. The present study proposed the factors which constituted *Resilience* and thus, could prove to be helpful for nursing professionals. The insights from the study may provide guidance to better moderate reactions of nursing professionals to stressors prevailing at the hospital settings that are responsible for creating more challenging work environment. The unified model further presented a change in the structure of resilience, with *Social Companionship* and *Social Competence* merging to form a single factor.

Implications of the study

Understanding resilience among nursing professionals can presciently assist nurses recognize and avoid potential difficulties and crisis situation, hence nurturing job resources and achievement of one's individual and professional goals. Increased resilience among nursing professionals can aid in a significant reduction in situations of *"emotional exhaustion", "increase work engagement",* & *"enhance function"* while witnessing adversities and challenges at work. The findings of the study can assist Nursing professionals to formulate strategies to confront difficult situations, adversity and moderate the impact of factors of job demand. The study provides a solution to the challenge of absence of an instrument with universal applicability and psychometric properties to measure resilience supports the crucial need of this study and provides novelty to this research. Additionally, in highly demanding and challenging healthcare environment currently prevailing in India, where nurses experience high-stress levels due to heavy workload and scarcity of resources, it was imperative to have a measurement scale that assesses resilience among health professionals.

Conclusion

Nursing is a noble service targeted towards the welfare of the human community that involves deep concentration, precision, and irreproachability along with empathy and care. It is a profession where resilience, perseverance, and patience are imperative than material aspects of salary, comfort, and conducive work culture. The present research has successfully buttressed the concept of Resilience among nursing professionals as it is recognised in the health management system in India. The study is a pioneer attempt to explore the construct of *Resilience* among nursing professionals. To construct the measure of resilience, three major considerations were taken into account. Firstly, three hitherto published resilience scales although not targeted at Nursing professionals were consulted. Secondly, literature was explored to identify adverse factors and situations related to the nursing profession specifically. Thirdly, the socio-cultural aspects of the Indian population and health care settings were given due consideration. It is possible that some dimensions could have been left unexplored. There is a scope for further exploration of the phenomenon.

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Appendix 1

Regression Weight Table for First Order CFA - Resilience

				Estimate	S.E.	C.R.	P
RESEL21	<---	SAN	0.659	1			
RESEL22	<---	SAN	0.687	1.005	0.072	14.03	***
RESEL23	<---	SAN	0.683	1.04	0.095	10.92	***
RESEL24	<---	SAN	0.736	1.094	0.094	11.65	***
RESEL25	<---	SAN	0.71	1.131	0.099	11.39	***
RESEL26	<---	SAN	0.8	1.289	0.103	12.57	***
RESEL27	<---	SAN	0.795	1.24	0.1	12.42	***
RESEL28	<---	SAN	0.801	1.334	0.108	12.4	***
RESEL29	<---	SAN	0.656	1.061	0.1	10.63	***
RESEL1	<---	PCT	0.753	1			
RESEL2	<---	PCT	0.886	1.09	0.064	17.13	***
RESEL3	<---	PCT	0.859	1.101	0.067	16.52	***
RESEL4	<---	PCT	0.875	1.177	0.07	16.89	***
RESEL5	<---	PCT	0.823	1.117	0.071	15.69	***
RESEL6	<---	PCT	0.792	1.085	0.072	15	***
RESEL10	<---	PCT	0.642	0.881	0.074	11.86	***

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RESEL13	<---	SCP	0.688	1			
RESEL14	<---	SCP	0.772	1.128	0.077	14.71	***
RESEL15	<---	SCP	0.891	1.232	0.084	14.72	***
RESEL16	<---	SCP	0.884	1.193	0.082	14.63	***
RESEL17	<---	SCP	0.819	1.111	0.081	13.64	***
RESEL18	<---	SCP	0.751	1.074	0.085	12.61	***
RESEL19	<---	SCP	0.543	0.799	0.086	9.333	***
RESEL7	<---	SCT	0.756	1			
RESEL8	<---	SCT	0.817	1.111	0.079	14.02	***
RESEL9	<---	SCT	0.668	0.886	0.077	11.56	***
RESEL11	<---	SCT	0.621	0.791	0.082	9.678	***
RESEL12	<---	SCT	0.67	0.858	0.074	11.58	***

Regression Weight Table for Second Order CFA - Resilience

				Estimate	S.E.	C.R.	P
SAN	<---	RESILIENCE	0.794	1			
PCT	<---	RESILIENCE	0.764	1.124	0.13	8.66	***
SCP	<---	RESILIENCE	0.755	1.072	0.129	8.301	***
SCT	<---	RESILIENCE	0.812	1.206	0.139	8.689	***
RESEL21	<---	SAN	0.659	1			
RESEL22	<---	SAN	0.69	1.011	0.072	13.98	***
RESEL23	<---	SAN	0.676	1.03	0.095	10.82	***
RESEL24	<---	SAN	0.72	1.071	0.094	11.43	***
RESEL25	<---	SAN	0.71	1.13	0.1	11.29	***
RESEL26	<---	SAN	0.808	1.302	0.104	12.55	***
RESEL27	<---	SAN	0.796	1.242	0.1	12.37	***
RESEL28	<---	SAN	0.778	1.298	0.107	12.13	***
RESEL29	<---	SAN	0.656	1.062	0.101	10.56	***
RESEL1	<---	PCT	0.746	1			

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RESEL2	<---	PCT	0.878	1.091	0.065	16.75	***
RESEL3	<---	PCT	0.852	1.103	0.068	16.18	***
RESEL4	<---	PCT	0.874	1.186	0.071	16.64	***
RESEL5	<---	PCT	0.844	1.158	0.072	16.01	***
RESEL6	<---	PCT	0.815	1.128	0.073	15.38	***
RESEL10	<---	PCT	0.643	0.891	0.075	11.83	***
RESEL13	<---	SCP	0.694	1			
RESEL14	<---	SCP	0.757	1.1	0.074	14.94	***
RESEL15	<---	SCP	0.897	1.23	0.082	14.97	***
RESEL16	<---	SCP	0.88	1.178	0.08	14.74	***
RESEL17	<---	SCP	0.798	1.078	0.08	13.49	***
RESEL18	<---	SCP	0.75	1.064	0.084	12.72	***
RESEL19	<---	SCP	0.548	0.8	0.085	9.452	***
RESEL7	<---	SCT	0.748	1			
RESEL8	<---	SCT	0.817	1.122	0.081	13.85	***
RESEL9	<---	SCT	0.672	0.901	0.078	11.53	***
RESEL11	<---	SCT	0.631	0.799	0.083	9.623	***
RESEL12	<---	SCT	0.676	0.874	0.075	11.58	***

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