



ORIGINAL CONTRIBUTION

Sense of Coherence as a Predictor of Positive Psychological Outcomes Among Adults

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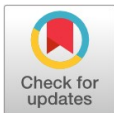
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Abstract— The purpose of the current study was to seek out the Sense of Coherence (SOC) as a predictor of well-being, happiness, life satisfaction, and tension. Standard self-report questionnaires were used to collect data. Sample of the present study comprised ($N = 200$). Psychometric properties of variables, reliability analysis, Pearson correlation, and linear regression analysis were applied to analyze the data. The hypotheses are fully accepted. SOC positively predicts well-being, happiness, and life satisfaction, while a SOC negatively predicts stress. A purposive sampling technique was used, thus the study was quantitative. The current investigation is an important expansion in writing on the hypothesis of the feeling of intelligibility. The present study contributes to the theory by suggesting the path to well-being, stress, happiness, and life satisfaction. The present study identified that the SOC positively predicts well-being, happiness, and life satisfaction. The research findings are helpful for the well-being, happiness, and life satisfaction of life for the betterment of a SOC. Prior research was conducted on the SOC and mental health outcome in subcultures of Pakistan', but this study used a sample of different peoples to cope with their difficulties. Past researches were based on cross-cultural, and now present research findings also confirmed the theories in a collectivistic culture. This study predisposes Pakistani research to work on the salutogenic model and explore the new perspective of SOC in Asian culture.

Index Terms— SOC, Well Being, Stress, Happiness, Life Satisfaction

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Introduction

The feeling of intelligibility is a hypothetical development that clarifies the part of worry in the individual's working at whatever point a man experiences with an upsetting life occasion and reactions to these occasions. The feeling of rationality assumes a critical part for stressors and an essential part to set the level of cognizance in one's life (Paul, 2007).

The idea of the feeling of soundness is presented by Antonovsky (1979), and it clarifies why a few people remain solid and some turn out to be sick in distressing circumstances. The cognizance idea emerged from the salutogenic display (concentrate on the beginning of well-being instead of discovering reasons for sickness). As indicated by Antonovsky (1987), in number, feeling cognizance is a critical variable to decrease stress, and it makes ready a man to think and trust that they can go over the requests of a stressor (Kinman, 2008; Napitupulu et al., 2016).

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Life satisfaction is how individuals evaluate their lives and feel about their course and options for what's to come (Sumner, 1996). It is a measure of prosperity and might be evaluated as far as disposition, fulfillment with relations with others and with accomplished objectives, self-ideas, and self-saw capacity to adapt to day-by-day life. It is having an ideal state of mind of one's life in general instead of an appraisal of current emotions. Life fulfillment has been measured in connection to financial standing, training, encounters, home, and numerous different points (Stewart, 1976).

As indicated by Seligman (1996), the more joyful individuals are, the less they are centered on the negative. Likewise, more joyful individuals have a more noteworthy inclination to like other individuals, which advance a more joyful condition, which relates to a more elevated amount of the individual's fulfillment with their life (Seligman, 1996). In any case, others have discovered that life fulfillment is good with significantly negative enthusiastic states like discouragement (Diener, Suh, Lucas, & Smith, 1999).

Mental prosperity has been depicted as the foundation of psychological wellness. As indicated by the (World Health Organization, 2005), psychological well-being is "a state of flourishing in which every individual comprehends his or her potential, can adjust to the regular stresses of life, can work beneficially and gainfully, and can make a promise to her or his gathering" (Gough, McGregor, & Camfield, 2007). While customarily, mental prosperity has been characterized by an absence of side effect trouble (i.e., absence of despondency, tension, and different manifestations of mental issue), after some time, the term has gone up against a more positive definition (Keyes & Magyar-Moe, 2003). Mental prosperity has become progressively perceived as something other than a nonappearance of distressful manifestations; however now incorporates positive qualities people have that can prompt emotional wellness.

Bliss" is a word with a thousand definitions. When many people today utilize the word, they mean constructive feeling or constructive effect. It's likewise shorthand for fulfillment with life or general prosperity (Christoph & Noll, 2003). We could compare the feeling of bliss to delight; however, satisfaction is now and then the idea of as more profound than joy, which can feel more straightforward and bright in nature. Throughout the years, bliss has implied numerous different things, some of which are astonishing when contrasted and our present feeling of the word (Bernhard & Noll, 2003).

Significance of Study

SOC is the ability of human beings to cope with difficult or stressful situations. It provides insight to individuals about the nature of the stressor:

Past research shows that feeling rationality's immediate impact on prosperity and stress is settled. Along these lines, the momentum request concentrated on expanding the past research in which a roundabout way is being explored. Consequently, this exploration depends on intelligence as an indicator of positive mental results. Past research was based on cross-cultural, and current research findings are confirmed on collectivistic culture. Furthermore, this research gives a predisposition to Pakistani researchers to work on the salutogenic model and exploring of new perspectives of SOC in Asian culture

Objectives

1. To examine the effect of Sence of Coherence in Prediction of Life satisfaction, well-being, happiness, and stress among adults.
2. To examine the mean difference of Sence of coherence among adults.

Literature Review

A physiological or natural concern is a living being's reaction to a stressor, for example, a biological condition (Carpenter et al., 2010). Stress is a body's strategy for responding to a test. As indicated by the unlikable occasion, the body's reaction to stress is by thoughtful sensory system enactment, which brings about the battle or-flight reaction (Lepage-Saucier & Wasmer, 2016). Since the body can't keep this state for drawn-out stretches of time, the parasympathetic framework restores the body's physiological conditions to ordinary (homeostasis). In people, push normally depicts an adverse or constructive condition affecting a man's mental and physical prosperity (Greenfield, 2000).

Antonovsky suggested that "there is justification for keeping up that the living human being is liable to consistent psychosocial stressors by the very certainty of having been conceived and survived" (Antonovsky, 1987). Antonovsky (1987) understood that stressors are antagonistic, and individuals have typically unwelcome and troubling demeanors while confronting these stressors. Another essential result of saw social support is prosperity. Social bolster, both specifically and roundabout, influences prosperity by making a feeling of soundness (Antonovsky, 1987). Positive clinicians clarify prosperity as a pointer of joy, fulfillment with life, and positive emotions (Diener, 1984; Sengphet, Hui, & Phong, 2019). Wissing and Van Eeden (2002) review detailed that soundness is very much looked into as an indicator of mental prosperity. Various reviews affirmed its capacities as a compelling method for dealing with stress (Katalan, 2003; Madhoo, 1999; Otto, 2002). Antonovsky (1987) indicated that a man who has solid prosperity also has a solid and powerful

full Feeling of cognizance, and its part including fathomability, reasonability, and weightiness likewise add to the prosperity of an individual Antonovsky (1987). Moksnes and Espnes (2020) investigated the associations between sex, age, socioeconomic status, stress, SOC, and health (mental well-being, depressive symptoms, self-rated health, and subjective health complaints) in Norwegian adolescents aged 13-19 years. Results showed that SOC is associated significantly with mental well-being.

Dymecka, Gerymski, and Machnik-Czerwik (2021) proposed that the important role of SOC is to influence the emotions experienced in difficult situations. SOC may limit the experience of negative emotions in stressful situations. People with a strong SOC experience emotions consciously, providing a motivational basis for action. Therefore, the SOC's mediational role between fear of COVID-19 and life satisfaction seems theoretically justified and was empirically verified.

According to Dymecka et al. (2021), many empirical studies have demonstrated the relationship between SOC and life satisfaction. Data from empirical studies confirmed that SOC could affect life satisfaction, acceptance of inevitable difficulties, and sense of control of situations. Many empirical studies have confirmed the relationship between SOC and subjective well-being, quality of life, and satisfaction with life. A strong SOC is particularly important when an individual experiences very difficult situations. They also stated in their research that many studies have also confirmed the role of SOC as an important mediator of the relationship between a variety of variables, including life satisfaction. SOC is a mediator between stress and life satisfaction. They also found that the significant mediation of SOC can explain worry, anxiety, stress, and life satisfaction. SOC can act as a protective factor in the process of adaptation to difficult life events, and the mediation path found in their study can help to understand how it does so.

A person with a strong SOC sees the world as orderly and understandable and finds order in the environment, helping them to better cope with chaotic stimuli. A strong SOC can allow people to approach difficult situations as challenges rather than obstacles. A high SOC is also associated with an appropriate response to emotional stimuli, low sensitivity, and high emotional resilience. People with strong SOC seek information only when they need it to solve a problem and not when it causes overload (Ornell, Schuch, Sordi, & Kessler, 2020).

Moksnes, Løhre, and Espnes (2013) investigated possible gender and age differences on life satisfaction and the association between SOC and life satisfaction. Results indicated that SOC is strongly and positively associated with life satisfaction.

Hypothesis

H1: SOC will positively predict life satisfaction among adults.

H2: SOC will positively predict well-being among adults.

H3: SOC will positively predict happiness among adults.

H4: SOC will negatively predict stress among adults.

Method

Sample

The momentum examination depended on an overview look into the plan. The test of the present review involved grown-ups ($N = 200$) with ages extended from 25 to 30 years. Both male ($N = 100$, half) and female grown-ups ($N = 100$, half) were incorporated into the review. Information was gathered from college understudies. The purposive examining method was utilized to gather the information from members. Just full-time college understudies of leading classes were incorporated into the example.

Assessment Measures

SOC scale:

The feeling of cognizance scale Antonovsky (1987) is included 13-things. The scale comprised three subscales, including fathomability, sensibility, and seriousness. The scale depends on 7 point Likert-sort reaction organized. The reaction classes extended from 1 for unequivocally differ to 7 for emphatically concur. There is no cut-off score on the scale. In this manner, high scores demonstrate a high feeling of rationality and the other way around. The base and greatest scores on the scales are 13 and 91 separately. The dependability of the first scale is .77.

Satisfaction with life scale:

Fulfillment with life scale Diener, Emmons, Larsen, and Griffin (1985) included 5 things. The scale depends on 7 points Likert-sort reaction arrangement. The reaction classes run from 1 = unequivocally differ to 7 = strongly concur. Every one of the things is emphatically scored. There is no cut-off score on the scale along these lines; high scores demonstrate high life fulfillment and the other way around. The base and most extreme scores on the scales are 5 and 35, separately. The alpha unwavering quality of the scale is .70.

Subjective happiness scale:

Subjective bliss scale (Sonja Lyubomirsky, Ph.D.) included 4 things. The scale depends on 5 point Likert-sort reaction arrangement. The reaction classes gone from 1 = emphatically differ to 5 = unequivocally concur. Thing 4 is turned around scored while others are decidedly scored. There is no cut-off score on the scale in this way, high scores show an abnormal state of joy and the other way around. The base and most extreme scores on the scales are 5 and 20 separately.

Depression, anxiety, and stress scale:

Melancholy, Nervousness Push Scales (DASS) is produced by (Lovibond & Lovibond, 2002). A short form of scale (DASS-21) is utilized in the present review. This scale is comprised of 21 things. The scale is involved 3 subscales, i.e., Melancholy, uneasiness, and stress. Each subscale has 7 things. The scale depends on 4 points Likert-sort organize from 0 = Never to 3 = dependably. Every one of the things is emphatically scored. There is no cut-off score on the scale this way, high scores show an abnormal state of wretchedness and the other way around. The base and most extreme scores on the scales are 0 and 21, separately. The alpha unwavering quality of the (DASS) levels was attractive for subscale, for example, .88 for wretchedness, .82 for nervousness, and .90 for strain and alpha dependability of aggregate scale likewise acceptable that is .93.

Short Warwick Edinburg well-being scale:

Warwick and Edinburg Colleges were charged to build up this in 2006. A small form of Warwick Edinburg prosperity range is utilized in this review. This is a size of seven things, by five reaction classes from 1= emphatically differ to 5= firmly concur. Every one of the things is decidedly scored. There is no cut-off score on the scale in this way, high scores demonstrate the abnormal state of prosperity and the other way around. The base and most extreme scores on the scales are 7 and 35, separately. The unwavering quality of the scale is .83.

Procedure

Information was gathered from grown-ups. Specialists finished information gathering by and by. Right off the bat specialist moved toward the grown-ups and presented herself and about the review. After a brief depiction about the reason for the review, the educated assent was acquired from the members in a composed frame, and determining directions were given to the members about the scales. The surveys were managed amid working hours, and no time cut-off points were settled. Toward the end, the scientist expressed gratitude toward the members for their significant participation.

Results

Table I
Psychometric properties of consider factors

Variables	1	2	3	4	5
SOC	(.70)	.21*	-.08	.23*	.19
Well being		(.76)	-.42***	.92***	.96***
Stress			(.82)	-.46***	-.44***
Happiness				(.73)	.96***
LS					(.72)
<i>M</i>	61.91	27.31	15.95	15.92	19.59
<i>SD</i>	8.68	4.76	6.06	2.81	5.45
Potential range	13-65	7-35	7-28	4-20	5-25
Actual Range	36-84	10-34	8-31	6-20	7-25
Skewness	-.57	-1.05	.82	-1.07	-1.02
Kurtosis	.72	1.21	-.24	1.86	1.31

Note. SOC = Sense of coherence; LS = life satisfaction; reliability is expressed in diagonal; **p* < .05, ***p* < .01, ****p* < .001

Table I shows the psychometric properties of study variables. Findings indicate that the alpha reliability for SOC, well-being, stress, happiness and life satisfaction has coefficients of .70, .76, .82, .73, and .72, respectively, indicating that the scales have internal consistency and appropriate for further study evaluation analyses. It can also be noticed that the estimations of skewness and kurtosis are fewer than 2, which demonstrates that typicality is not risky.

Also Table shows the Pearson correlation among the variables. Findings indicate that SOC show significant positive correlation with wellbeing ($r = .21, p < .05$), happiness ($r = .23, p < .05$) and life satisfaction ($r = .19, p > .05$). And SOC shows negative non-significant correlation with stress ($r = -.08, p > .05$). Findings indicate that wellbeing shows significant positive correlation with happiness ($r = .92, p < .001$), life satisfaction ($r = .96, p < .001$) and wellbeing have noteworthy negative relationship with stretch ($r = -.42, p < .001$). Findings also indicate that stress has major negative correlation with happiness ($r = -.46, p < .001$) and life satisfaction ($r = -.44, p < .001$). Happiness has considerable positive correlation with life satisfaction ($r = .96, p < .001$).

Table II
Linear Regression study viewing the effect of SOC on the calculation of well-being among adults

Outcome: WB		
95% CI		
Predictors	B	LL, UL
(Constant)	18.74***	[14.57, 22.90]
SOC	.267***	[.063, .194]
R^2	.065	
F	14.82***	

Note. WB = Well-being; SOC = Sense of coherence; *** $p < .001$

Linear Regression is computed with SOC as autonomous and well-being as effect variables. The R^2 value of .065 indicates that 6.5% variance in the dependent variable can be accounted for the predictors with $F(1, 198) = 14.82, p < .001$. Results indicate that SOC is an important positive analyst of well-being among adults ($B = .267, p < .001$).

Table III
Linear Regression examination showing the result of a SOC on the prediction of happiness among adults

Outcome: Happiness		
95% CI		
Predictors	B	LL, UL
(Constant)	10.804***	[8.14, 13.46]
SOC	.242**	[.033, .117]
R^2	.054	
F	12.33***	

Note. SOC = Sense of coherence; ** $p < .01$ *** $p < .001$

Linear Regression is added with SOC as independent variable and happiness as result variable. The R^2 value of .054 shows that 5.4% variance in the dependent variable can be accounted for the predictors with $F(1, 198) = 12.33, p < .001$. Results indicate that SOC is significant positive predictor of happiness among adults ($B = .242, p < .01$).

Table IV
Linear regression analysis screening the effect of SOC on the prediction of stress among adults

Outcome: Stress		
95% CI		
Predictors	B	LL, UL
(Constant)	17.15***	[12.40, 21.90]
SOC	-.069	[-.112, .038]
R^2	.005	
F	.942	

Note. SOC = Sense of coherence; *** $p < .001$

Linear Regression is calculated with SOC as self-regulating and stress as outcome variables. The R^2 value of .005 specify that 0.5% variance in the dependent variable can be accounted for the predictors with $F(1, 198) = .942, p > .05$. Results indicate that SOC is a non-significant negative predictor of stress among adults ($B = -.069, p > .05$).

Table V
 Linear regression analysis presentation the effect of SOC on the prediction of life satisfaction among adults

Predictors	Outcome: LS	
	B	95% CI
(Constant)	13.80***	[10.64, 16.96]
SOC	.234**	[.036, .135]
R^2	.050	
F	11.42**	

Note. LS = Life Satisfaction; SOC = Sense of coherence; ** $p < .01$, *** $p < .001$

Linear Regression is figured with SOC as the independent variable and life satisfaction as the outcome variable. The R^2 value of .050 indicates that 5.0% variance in the reliant variable can be accounted for the predictors with $F(1, 198) = 11.42, p < .01$. Outcomes indicate that SOC is a significant positive predictor of adult life satisfaction ($B = .234, p < .01$).

Discussion

The present examination inspected the feeling of cognizance and results in prosperity, stress, bliss, and life fulfillment. The discoveries demonstrated the hidden speculative suppositions. The hypothesis of the feeling of intelligibility was proposed by (Antonovsky, 1987). A feeling of cognizance alludes to a person's capacity to adequately adapt to life stressors and the ability to raise the level of prosperity Antonovsky (1979). The present discoveries affirmed the hypothesis under scrutiny. Discoveries affirmed the immediate and circuitous impact of the feeling of cognizance on improving prosperity and lessening stress. The hypothesis is considered in the Pakistani site and supplies in writing for socialist culture because no such effort has been made so far in the Pakistani surroundings. The review offers helpful information regarding the immediate and aberrant part of the feeling of intelligibility in prosperity, stress, joy, and life fulfillment. The quick way has been very much explored in the past research (Qudsia, 2015); however, the momentum investigates concentrated on the roundabout impact of the feeling of soundness, which expands the hidden hypothesis.

Alongside the direct impact of feeling rationality, there is likewise an aberrant impact on prosperity, stress, joy, and life fulfillment. Prosperity and feeling of lucidness are firmly identified with each other Antonovsky (1979). Social connections potentially impact three-segment of the feeling of soundness, including fathomability, sensibility, and weightiness Larsson and Kallenberg (1996).

This review was directed to think about the contrasts between the grown-ups and to watch the emotional wellness of individuals in Pakistan and how they adapt to challenges. This is overview research, and the reason for leading that exploration is how's kin center in their inconveniences and what the part of the feeling of lucidness is. Stress and gloom contrarily foresee feelings of cognizance while prosperity, bliss, and life fulfillment emphatically anticipate the feeling of intelligibility. This is an exceptionally fascinating review and extremely supportive for others.

The point of this paper is to orchestrate experimental discoveries on the salutogenic idea of the feeling of intelligibility (SOC) and look at its ability to clarify well-being and its measurements (Antonovsky, 1987). The review is engaging and expository with a deliberate joining of the current information base on the salutogenic (explore distributed, 1992–2003). Feel lucidness is unequivocally identified with seen well-being, particularly emotional wellness (Nosheen, Riaz, & Batool, 2014). The more grounded the feeling of cognizance, the better the apparent well-being all in all, at any rate for those with an underlying high feeling of intelligibility (Saeed, 2014). This connection is shown in study populaces paying little heed to age, sex, ethnicity, nationality, and study plan. The feeling of soundness appears to have a primary, directing, or intervening part in clarifying well-being. Besides, the feeling of intelligence is ready to foresee well-being (Qudsia, 2015). Feeling rationality is an imperative donor for the advancement and support of individuals' well-being yet does not clarify the general well-being (Dewe, 1992).

By all accounts, the feeling of intelligence is well-being advancing asset, which reinforces strength and builds up a positive subjective condition of well-being (Dieckhoff, K., Freigang-Bauer, I., Schröter, W., & Viereck, K., 2002). Salutogenesis is an important approach for well-being advancement and would be worth executing practically speaking considerably more than to date (Qureshi, 2014). The proof demonstrates the salutogenic display as a well-being advancing asset that enhances flexibility and builds up a positive subjective condition of physical and emotional wellness, personal satisfaction, and prosperity (Riaz, Riaz, & Batool, 2014). The introduction to life poll/feeling of Soundness Scale (SOC) alludes to a continuing state of mind and measures how individuals see life and, in unpleasant circumstances, recognize, utilize, and reuse their general resistance assets to keep up and build up their well-being (May, Gilson, & Harter, 2004).

It is a legitimate, dependable, and diversely appropriate instrument for measuring well-being. The feeling of intelligence scale comprises no less than three measurements: conceivability, reasonability, and significance. Interestingly with Antonovsky's view, the structure of the scale is by all accounts multidimensional instead of unidimensional. The primary goal of this paper was to condense 25 years of

salutogenic research to present confirmation of the connection between feeling of soundness and well-being. This goal is applicable in general well-being and well-being advancement (Edwards, Thomas, Rosenfeld, & Booth-Kewley, 1997). We concur with Stephens et al. in their decision that procedures that advance the strength and other mental assets additionally will add to issue decrease and avoidance. Well-being advancement and illness aversion can maybe; it could be said, be viewed as two sides of a similar coin.

Every one of the theories was bolstered in the present review. The main theory, the feeling of soundness, decidedly predicts prosperity among understudies, upheld in the present review. The discoveries are steady with the earlier research Nosheen et al. (2014) directed diverse research in an individualistic and collectivistic culture, i.e., Germany and Pakistan found that SOC emphatically foresees prosperity among the understudies of both societies. The discoveries are likewise under the significant suppositions behind the SOC hypothesis that it can upgrade prosperity and diminish anxiety.

The second theory, 'feeling of cognizance contrarily predicts worry among grown-ups,' was likewise bolstered in the present examination. The discoveries of the present research are steady with past research in the indigenous setting. Past research demonstrated that lucidness contrarily anticipated anxiety and sadness among Muslims, Christians, and Sikhs (Rasheed, 2014).

The third theory, 'feeling of soundness emphatically anticipated life fulfillment in Muslims and Hindus,' was upheld in the present review. The ebb and flow discoveries are under the past research that likewise demonstrated the huge positive connection between life fulfillment and feeling cognizance among youths (Zimet, Dahlem, Zimet, & Farley, 1988). Another review additionally bolstered theory (Katalan, 2005). In this review, the feeling of soundness fundamentally anticipated fulfillment with life among grown-ups.

Forward theory 'feeling of rationality emphatically anticipated satisfaction among grown-ups' was likewise upheld in the present examination. The ebb and flow discoveries are under the past research that demonstrated the noteworthy positive corresponded amongst joy and feeling of lucidness among teenagers.

In this review, the feeling of intelligence altogether anticipated fulfillment with life among grown-ups. The present review is partly because of the augmentation of the past research. Generally speaking, the aftereffects of this review were attractive and positively contributed to the writing.

Implications

Earlier examines were led on 'Feeling of soundness and emotional well-being result in subcultures of Pakistan'; however, this review utilized a specimen of various people groups that how they adapt in their challenges. Past investigations depended on culturally diverse and now introduce inquire about discoveries likewise affirmed the hypotheses in a collectivistic culture. This review offers an inclination to Pakistanis to take a shot at the salutogenic show and investigate the new point of view of feeling cognizance in Asian culture.

Limitations and Suggestions

Because of time compels, the example taken was short. Test size can be upgraded for further reviews. Just scales were utilized to gather the information which may cause single sources predisposition. Further inquiries about information can be gathered from different assets to approve the discoveries. In the present review, a self-report measure used to gather the information is a probability of attractive social quality.

Conclusion

The primary goal of the current review was to investigate the results of the feeling of intelligence among grown-ups. The present review recognized that the feeling of rationality decidedly foresees prosperity, joy, and life fulfillment. The examination discoveries are useful for prosperity, joy, and life fulfillment to advance the feeling of intelligibility.

In the current review, the theories were bolstered. The review is a critical expansion in the feeling of lucidness writing as a rule. The discoveries make an important commitment, and these discoveries are exceptionally valuable and supportive to comprehend the relationship between factors.

References

- Antonovsky, A. (1979). *Health, stress, and coping*. San Francisco, CA: Jossey-Bass.
- Antonovsky, A. (1987). *Unrevealing the mystery of health: How people manage stress and stay well*. San Francisco, CA: Jossey-Bass.
- Bernhard, C., & Noll, H.-H. (2003). Subjective well-being in the European Union during the 90s. *Social Indicators Research*, 64(3), 521-546.
- Carpenter, L. L., Gawuga, C. E., Tyrka, A. R., Lee, J. K., Anderson, G. M., & Price, L. H. (2010). Association between plasma IL-6 response to acute stress and early-life adversity in healthy adults. *Neuropsychopharmacology*, 35(13), 2617-2623. doi:<https://doi.org/10.1038/npp.2010.159>
- Christoph, B., & Noll, H.-H. (2003). Subjective well-being in the European Union during the 90s. In *European welfare production* (p. 197-222). Dordrecht, Netherlands, Springer. doi:https://doi.org/10.1007/978-94-007-0977-5_8
- Dewe, P. (1992). The appraisal process: Exploring the role of meaning, importance, control and coping in work stress. *Anxiety, Stress, and Coping*, 5(1), 95-109. doi:<https://doi.org/10.1080/10615809208250490>
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542-575.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71-75.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276-302.
- Dymecka, J., Gerymski, R., & Machnik-Czerwik, A. (2021). How does stress affect life satisfaction during the COVID-19 pandemic? Moderated mediation analysis of sense of coherence and fear of coronavirus. *Psychology, Health & Medicine*, 31, 1-9. doi:<https://doi.org/10.1080/13548506.2021.1906436>
- Edwards, J. E., Thomas, M. D., Rosenfeld, P., & Booth-Kewley, S. (1997). *How to conduct organisational surveys*. Thousand Oaks, CA: Sage.
- Gough, I., McGregor, I. A., & Camfield, L. (2007). Theorizing wellbeing in international development. In I. Gough & J. A. McGregor (Eds.), *Wellbeing in developing countries: From theory to research*. Cambridge, UK: Cambridge University Press.
- Greenfield, P. M. (2000). Three approaches to the psychology of culture: Where do they come from? Where can they go? *Asian Journal of Social Psychology*, 3(3), 223-240.
- Katalan, L. (2003). *The sense of coherence and coping resources of HIV positive adult females attending a support group* (Unpublished master's thesis). University of Port Elizabeth, Port Elizabeth, South Africa.
- Katalan, L. (2005). *The sense of coherence and coping resources of HIV positive adult females attending a support group* (Unpublished master's thesis). University of Port Elizabeth, Port Elizabeth, South Africa.
- Keyes, C. L., & Magyar-Moe, J. L. (2003). The measurement and utility of adult subjective well-being. In S. J. Lopez & C. R. Snyder (Eds.), *Positive psychological assessment: A handbook of models and measures*. Washington, DC, WA: American Psychological Association. doi:<https://doi.org/10.1037/10612-026>
- Kinman. (2008). *Manual of life attitude profile- revised*. Peterborough, ON: Students Psychologist Press.
- Larsson, G., & Kallenberg, K. O. (1996). Sense of coherence, socioeconomic conditions and health: Interrelationships in a nation-wide Swedish sample. *The European Journal of Public Health*, 6(3), 175-180. doi:<https://doi.org/10.1093/eurpub/6.3.175>
- Lepage-Saucier, N., & Wasmer, E. (2016). Does employment protection raise stress? A cross-country and cross-province analysis. *Journal of Human Capital*, 10(1), 33-66.
- Lovibond, S. H., & Lovibond, P. F. (2002). *Manual for the depression anxiety and stress scales*. Psychology Foundation.
- Madhoo, K. (1999). *The coping orientation and coping resources of patients in cardiac rehabilitation* (Unpublished master's thesis). University of Port Elizabeth, Port Elizabeth, South Africa.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77(1), 11-37. doi:<https://doi.org/10.1348/096317904322915892>

- Moksnes, U. K., & Espnes, G. A. (2020). Sense of coherence in association with stress experience and health in adolescents. *International Journal of Environmental Research and Public Health*, 17(9), 1-12. doi:<https://doi.org/10.3390/ijerph17093003>
- Moksnes, U. K., Løhre, A., & Espnes, G. A. (2013). The association between sense of coherence and life satisfaction in adolescents. *Quality of Life Research*, 22(6), 1331-1338. doi:<https://doi.org/10.1007/s11136-012-0249-9>
- Napitupulu, L., et al. (2016). Traits of personality and age of marriage as predictors for psychological needs to use social networks. *International Journal of Business and Administrative Studies*, 2(2), 44-51. doi:<https://doi.org/10.20469/ijbas.2.10004-2>
- Nosheen, A., Riaz, M. N., & Batool, N. (2014). Cross-cultural study on social support, sense of coherence and outcomes in Pakistan and Germany. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 8(2), 445-452.
- Ornell, F., Schuch, J. B., Sordi, A. O., & Kessler, F. H. P. (2020). "pandemic fear" and COVID-19: Mental health burden and strategies. *Brazilian Journal of Psychiatry*, 42(3), 232-235. doi:<https://doi.org/10.1590/1516-4446-2020-0008>
- Otto, C. G. (2002). *Coping orientation and resources of adult patients with depressed mood* (Unpublished master's thesis). University of Port Elizabeth, Port Elizabeth, South Africa.
- Paul. (2007). *The cultural animal: Human nature, meaning, and social life*. New York, NY: Oxford University Press.
- Qudsia, A. (2015). *Mental health consequences of sense of coherence among Muslims and Hindus* (Unpublished master's thesis). University of Haripur, Haripur, Pakistan.
- Qureshi, N. (2014). *Antecedents and consequences of psychological problems among adults: Role of early maladaptive schemas* (Unpublished M.Phil dissertation). Department of Psychology University of Sargodha, Sargodha Pakistan.
- Rasheed, M. (2014). *Outcomes of sense of coherence among adults: A comparative study of Muslims, Christians and Sikhs* (Unpublished master's thesis). University of Haripur, Haripur, Pakistan.
- Riaz, H., Riaz, M. N., & Batool, N. (2014). Positive psychological capital as predictor of internalizing psychological problems among flood victims. *Journal of the Indian Academy of Applied Psychology*, 40(1), 102-112.
- Saeed, A. (2014). *Sense of coherence and mental health outcomes in subcultures* (Unpublished master's thesis). University of Haripur, Haripur, Pakistan.
- Seligman, M. E. (1996). Science as an ally of practice. *American Psychologist*, 51(10), 1072-1079. doi:<https://doi.org/10.1037/0003-066X.51.10.1072>
- Sengphet, P., Hui, L., & Phong, L. B. (2019). The pathway to improve innovation capacity for Lao firms: The roles of transformational leadership and psychological resources of employees. *International Journal of Business and Administrative Studies*, 5(2), 224-239. doi:<https://dx.doi.org/10.20469/ijbas.5.10004-4>
- Stewart, R. A. (1976). Satisfaction in stages of the life cycle, levels of general happiness and frequency of peak experience. *Social Behavior & Personality: An International Journal*, 4(1), 105-108.
- Sumner, L. W. (1996). *Welfare, happiness, and ethics*. Oxford, UK: Clarendon Press.
- Wissing, M. P., & Van Eeden, C. (2002). Empirical clarification of the nature of psychological well-being. *South African Journal of Psychology*, 32(1), 32-44.
- World Health Organization. (2005). *Promoting mental health* (Tech. Rep.). Geneva, Switzerland: World Health Organization.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, 52(1), 30-41. doi:https://doi.org/10.1207/s15327752jpa5201_2