

TRANSLATION AND VALIDATION OF ENGLISH VERSION OF PSYCHOLOGICAL INFLEXIBILITY IN PAIN SCALE (PIPS) INTO URDU LANGUAGE: ANALYSIS OF PSYCHOMETRIC PROPERTIES

Author's Name: Aisha Shakeel¹, Safa Majeed², Laiba Imran³, Remsha Amanat⁴,

Momina Jaffar⁵, Eman Ameer⁶, Meera Irshad^{7*}

Affiliation:

1. Lecturer, Department of Psychology, University of Sialkot, Sialkot, Pakistan.
Ayesha.shakeel@uskt.edu.pk
2. Research Scholar, Department of Psychology, University of Sialkot, Sialkot,
Pakistan. safakhokhar68@gmail.com
3. Research Scholar, Department of Psychology, University of Sialkot, Sialkot,
Pakistan. Laibaimran2002151@gmail.com
4. Research Scholar, Department of Psychology, University of Sialkot, Sialkot,
Pakistan.
5. Research Scholar, Department of Psychology, University of Sialkot, Sialkot,
Pakistan. mominajafer9@gmail.com
6. Research Scholar, Department of Psychology, University of Sialkot, Sialkot,
Pakistan. emanameer00737@gmail.com
7. Research Scholar, Department of Psychology, University of Sialkot, Sialkot,
Pakistan. meerabajwa01@gmail.com

Corresponding Author Name: Meera Irshad, meerabajwa01@gmail.com

ABSTRACT

The current study sought to translate and adapt the English version of the Psychological Inflexibility in Pain Scale into Urdu, a National Language of Pakistan. Moreover, to calculate the Translated Urdu Version's psychometric properties on Sialkot's typical population. The sample consisted of 120 participants, randomly selected from various universities in Sialkot. The current examination consists of two phases. Forward and reverse translation was done in the initial phase. In the second phase, the reliability and validity analysis were performed. Findings indicate appropriate levels of psychometric properties including the reliability of Scale (.87). Reliability of subscales avoidance (.86) and fusion (.67). Inter-item correlation is highly positively significant. Convergent validity with anxiety ($r=.22^$), depression ($r=.05^*$) and Divergent validity ($r = -.18^*$) with Generalized self-efficacy scale. The majority of people in Pakistan understand Urdu Language, as it is the native language of Pakistan. It was quite hard for people to participate in studies because they had trouble comprehending English. For this purpose, the scale is translated into Urdu Language. Hence, through statistical analysis, it has been yielded that for the population of Pakistan, it is an appropriate instrument.*

Keywords: Psychological Inflexibility, Avoidance, Fusion, Generalized self-efficacy

INTRODUCTION

Numerous investigations identified Psychological Inflexibility to be a significant factor in Human Health Psychology. The research demonstrates psychological inflexibility as an inability to adapt and deal with unusual circumstances. It is a constant condition of resistance to change (Dutt, 2022). Excessive worry, avoidance, inability to focus, and rigid thoughts are some of the common symptoms of those, who lack psychological flexibility. People used to avoid the problems they are dealing with and it might be devastating to one's mental health, socialization, personal growth, and relationships. Likewise, psychologically inflexible people may also have difficulty in other aspects of life, for instance, emotional instability, and having trouble self-regulating and adjusting to new situations. They may experience overwhelming worry and anxiety, avoidance, cognitive fusion, lack of contact, and limited self-knowledge. The dysfunctional control attitudes on which psychological inflexibility consists, are named as six fundamental processes of psychological inflexibility: cognitive fusion, avoidance, conceptualized self, impulsivity, disrupted values, and inappropriate attention. A study showed that an individual with greater intensities of psychological inflexibility might develop high levels of psychological predispositions (Erol et al., 2020).

As per additional studies, psychological inflexibility mediates the impact of stress. A type of pervasive psychological exposure is psychological inflexibility which is associated with psychopathological tendencies, depressive symptoms, and physical health (Patricia et al., 2021). Furthermore, the study of Mark (2022) showed that there is a higher probability of an association between Psychological inflexibility and depressive symptoms in men than in women. Another investigation found that psychological inflexibility is a trans-diagnostic process related to a range of anxiety, depression, eating disorders, substance abuse disorders, and other psychopathological symptoms (Levin et al., 2014). Also, predictive values of Psychological Inflexibility for depression and suicidality have been examined. High psychological inflexibility and little application of coping mechanisms raised the risk of both depression and suicidality. Furthermore, in students, a substantial relationship of psychological inflexibility with depression, anxiety, and drug addiction was found (Wei et al., 2018).

However, according to the study of Shakeel et al., (2023) which examined that people with chronic pain developed mental health conditions such as sadness and anxiety due to psychological inflexibility, the findings revealed that Psychological Inflexibility, Anxiety, Depression, Self-efficacy possess an important bond with one another. Conversely, the literature showed that Psychological Inflexibility is linked to and substantially predicted panic measures,

social anxiety, other anxieties, and depression. In the adult population, Psychological inflexibility is beneficial for various disorders including social anxiety disorder (Vagos et al., 2023). It not only provides harmful effects but also lowers the levels of healthy and positive abilities. For instance, the increased number of psychological inflexibilities reduces self-esteem, self-efficacy, and mindfulness.

Moreover, a study suggested that psychological inflexibility is a significant factor linked to lower self-efficacy and greater severity of fatigue Kara et al., (2022). Similarly, Francisco and Span (2014) found that the effects of anxiety sensitivity and self-efficacy on worry are mediated by psychological inflexibility. The results of the mediation analysis demonstrated that the only component that completely mediated the effects of anxiety and generalized self-efficacy on pathological tendencies was psychological inflexibility.

Although psychological inflexibility can develop in any person, it is more likely to occur in those who suffer from another mental or physical illness or experience pain. People suffering from chronic pain are at increased risk of developing psychological inflexibility. It has been identified as a significant contributor to the misery imposed by the conditions that trigger chronic pain (Karekla et al., 2015).

In Pakistan, plenty of people suffer from various ailments, so their chances of developing psychological inflexibility increase. For analysis, it is a requirement to gather data from individuals, who are at risk of developing psychological inflexibility. Pakistan is a developing country with an inadequate educational system. The majority of People are bilingual. Although individuals may only understand their native or national language, English is the official language of this tool. Therefore, the goal is to create an accurate and reliable instrument in Urdu Language to assess psychological inflexibility.

OBJECTIVES OF THE STUDY

1. To translate the Pain Scale's Psychological Inflexibility: An English-Urdu Translation Language.
2. To determine the psychometric qualities of the translation from Urdu to Psychological inflexibility in pain scale.

METHOD

Research design:

Correlation research design was used in this study.

Research variables:

This research centered around three main variables: psychological inflexibility, which served as depression, anxiety, and self-efficacy all served as dependent variables on the independent variable

.

Participants:

In this research, a total of 120 participants comprising 31 men and 89 women were drawn through various Pakistani hospitals located in Sialkot to assess psychological inflexibility about depression, anxiety, and self-efficacy. The selection of participants was accomplished using purposive sampling, and their ages ranged from 20 to 50 years.

Inclusion criteria:

The participant's selection criteria for the research revolved around including all hospitals in Sialkot, Pakistan. Furthermore, the study specifically targeted patients in the age range of 20 to 50. Both males and females were allowed for a gender-based analysis. Moreover, only the participants suffering from chronic illness have been included in the study. People who are victims of chronic illnesses are at high risk of developing psychological instability. The data was collected data only from hospitals in Sialkot.

Exclusion criteria:

On the other hand, the patients of other areas were not included. Patients other than chronic illnesses have not been included in the study. Only those people were included who had long-lasting pain (chronic pain) and had been suffering from any chronic disease. Participants below 20 years or above 50 were excluded to Maintain the specified age.

Consent form

To ensure ethical compliance, prior approval of each participant was sought through the use of a consent form.

Demographic form

Specific details about participation characteristics were gathered through the use of demographic form. This demographic form included inquiries about the participant's age, gender, and educational background, enabling a comprehensive understanding of their characteristics and providing essential content for the study. This practice is fundamental in safeguarding participants, rights and enhancing the research's validity.

Psychological Inflexibility in Pain Scale (PIPS)

The Psychological Inflexibility in Pain Scale (PIPS), created by Rikard et al., (2009) is a tool comprising 16 items designed to evaluate different facets of how individuals with chronic pain deal with their condition. It evaluates Factors such as avoidance of pain, cognitive fusion, value orientation, and discomfort. In this study, the (PIPS) was rendered into Urdu from English by this study researchers, with permission from the original author, to facilitate participants understanding. The scale consists of two main components: Avoidance of being a fusion with pain thoughts, each with seven response options ranging from never true to always accurate. The score for fusion with pain ideas is 1, 4, 5, 6, 10, and 12, while the score for avoiding pain items is 2, 3, 7, 8, 9, 11, 14, 15, and 16. Higher scores on this scale indicate a higher degree of psychological inflexibility in managing chronic pain over time.

Hospital Anxiety and Depression scale (HADS)

The hospital anxiety and depression scale In its Urdu version, developed by Tareen et al., (1991), places a special focus on minimizing the impact of physical illnesses On the overall score this 14-item assessment is designed to evaluate symptoms of anxiety and depression in patients And is divided into two subcategories: depression and anxiety scale. The depression scale includes items 2, 4, 6, 10, 10, 12, and 14, while the anxiety scale comprises items one, three, five, 7, 9, 11, and 13 dots the adaptation aimed to create a tool for identifying anxiety and despair, especially in individuals with physical health issues, following the approach suggested by (Mumford et al., 1983).

The Generalized Self-Efficacy Scale (GSES)

The generalized self-efficacy (GSES) in its Urdu version was developed by Tabssum et al., (2003), is a 10-item psychometric tool intended to assess the abilities of individuals aged 12 years or older to manage challenging tasks in their lives each item offers response Options on a four-point Likert scale with four dimensions: One = Not at all true, 2 equal hardly true, 3 = moderately true, and 4 = equal exactly true following the framework outlined by (Schwartz et al., 1995).

Procedure

There are four stages to this research: The translation and adaptation phase is the first stage, the cross-language validation process is the second, and the psychometric properties, such as the scale's validity and reliability analysis, are determined in the third phase.

Phase 1: Interpretation and Modification

The objective of this study is to undertake translation and adjust the Psychological Inflexibility in Pain Scale (PIPS) into Urdu language. In Pakistan the national language is Urdu. It facilitates wider accessibility for the population, promotes inclusivity, enhances user understanding, and increases the tool's usability within the local context. It will also help in reaching a larger audience, those who are more comfortable and fluent in the national language. The process of translation in both directions was conducted to ensure accuracy and linguistic and cultural relevance. It includes three essential steps.

Development of an Expert Board

The ultimate version underwent a comprehensive analysis and received validation from a specialized committee. This committee comprised individuals with prior involvement in the translation and adaptation process, possessing significant expertise in these domains. The selection included PhD scholars proficient in both English and Urdu languages. The panel was composed of four highly skilled PhD professionals.

Forward translation

It involves translating a source text into the target language. This initial translation helps to convey the core message and meaning of the original content. Each translator received instructions to work on the translation of the scale draft. They were

guided to emphasize maintaining the essence and conceptual meaning of the items, as presented in the English version. Additionally, psychologists assessed the translated scale, and based on their judgment, a draft was chosen.

Backward translation

It involves translating the newly created content back into the original language. This step helps to verify the accuracy of the forward translation, ensuring that the meaning has been preserved and that the translation is culturally appropriate and accurate. Scholars retranslated the scale to its original language, emphasizing attaining conceptual equivalence. Once the draft was created it underwent a comparison with the original version and any disparities or inconsistencies were rectified and resolved.

Phase 2: Cross-Language Validation

To assess the cross-language validity of the scale, 50 participants of both genders were chosen within the age range of 20-24 years. All selected participants were undergraduate students recruited from the University of Sialkot. In this research methodology, we ascertain and recognize the sufficiency of the translated edition while also making adjustments to items that appeared challenging or unclear for the participants to understand.

Phase 3: Establishing Psychological Properties of Urdu Versions (PIPS)

In this part, alpha coefficient by Cronbach's, Inter-item Correlation, Convergent Validity, and Divergent Validity of freshly translated version Psychological Inflexibility in Pain Scale were discussed. This approach is employed to determine the scale's consistency and accuracy.

a) Alpha coefficient by Cronbach's

Alpha coefficient by Cronbach's serves as a tool to evaluate the internal consistency reliability of a scale or a group of items in a questionnaire. The calculated coefficient alpha for the Psychological Inflexibility of Pain Scale (PIPS) with 16 items is .87, indicating highly reliable scale. In contrast, the coefficient alphas for the subscales are Avoidance ($\alpha = .86$) displaying high reliability, and Fusion ($\alpha = .67$) indicating moderate reliability for this specific subscale. The complete Psychological Inflexibility of Pain has a skewness value of -0.63 and a kurtosis value of 0.04.

b) Inter-item Correlation

Inter-item correlation is conducted to understand how different items within a scale or questionnaire are related to each other. The inter-item correlation was performed on the Psychological Inflexibility in Pain scale, consisting sixteen items. That findings reveal a consistently strong, positive, and statistically significant correlation among all the items within the Psychological Inflexibility in Pain Scale.

c) Convergent Validity

Convergent validity refers to a measure used in research to assess whether different methods or measures intended to evaluate the same concept or construct yield similar or correlated results. The correlation between the Psychological Inflexibility of Pain Scale and the Hospital Anxiety Depression Scale is evident.

d) Divergent Validity

Divergent accuracy also known as distinctiveness validity is a concept used in research to determine if measures designed to assess different constructs or concepts are distinct from each other. The correlation between the Psychological inflexibility of Pain scale and the Generalized Self-Efficacy Scale is depicted.

RESULTS

To estimate the internal consistency of Psychological inflexibility in pain Scale Urdu edition, analysis using four statistical methods:

Cronbach's alpha

Inter-item Correlation

Convergent Validity

Divergent Validity

Table 01:

Cronbach's Alpha Reliability Coefficients of Urdu version of psychological inflexibility in pain Scale & the subscales (N=120):

Variable	N	M	S.D	α	Range		Skewness	Kurtosis
					Actual	Potential		
PIPS	16	80.75	16.16	.87	32-112	1-7	-.63	.04
Avoidance	10	48.36	11.97	.86	12-70	1-7	-.77	.34
Fusion	6	32.39	5.64	.64	17-42	1-7	-.59	.02

Note. α = coefficient of reliability; N= number of items; M= mean; S.D= standard deviation.

Table 1 indicated that the coefficient alpha of (PIPS) variable for 16 items is .87, which shows a highly reliable scale. On the other hand, the coefficient alpha of subscales is Avoidance α =.86, which shows high reliability, and Fusion α =.67, which shows this subscale is moderately reliable. The skewness value of complete psychological inflexibility of pain is -.63 and the Kurtosis value is .04 respectively.

Table 02:

Correlation between the English version and Urdu versions of psychological inflexibility in pain scale by Cronbach's Alpha:

Variables	PIPS English Version	PIPS Urdu Version
Avoidance	.90	.86
Fusion	.75	.64
Total	.89	.87

Note. PIPS: Psychological Inflexibility in Pain Scale.

Table 2 indicates Cronbach's Alpha regarding the English version of PIPS α = .89, Avoidance α = .90, and the value of fusion is α = .75. On the hand the Cronbach's Alpha of the Urdu Version of Psychological inflexibility in pain scale α = .87, Avoidance α = .86 and the value of fusion is α = .64 which shows the inter-item consistency based on their inter-item correlation; that presents the high level of internal consistency in both Psychological inflexibility in pain scale English and Urdu version.

Table 3:

Inter-Item Correlation of Urdu Version of Psychological Inflexibility of Pain Scale (N=120):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.00															
.44**	1														
.37**	.39**	1.00													
.27**	.27**	.41**	1.00												
.32**	.25**	.33**	.66**	1.00											
0.08	.22*	.34**	.21*	.19*	1.00										
0.12	.29**	.37**	.28**	.24**	.45**	1.00									
.20*	.38**	0.17	.26**	.31**	.28**	.42**	1.00								
0.07	.18*	.22*	.32**	.25**	0.17	.46**	.43**	1.00							
0.06	.29**	0.04	.35**	.31**	0.07	0.14	.22*	.30**	1.00						
0.17	.35**	.31**	0.16	.21*	0.17	.33**	.20*	.29**	.18*	1.00					
0.06	.49**	0.15	.26**	.28**	0.16	.31**	.30**	.40**	.42**	.44**	1.00				
.25**	.44**	.35**	.18*	.29**	.30**	.37**	.38**	.38**	.26**	.43**	.52**	1.00			
0.12	.44**	.21*	0.15	.26**	.29**	.35**	.47**	.40**	.21*	.35**	.38**	.59**	1.00		
0.13	.35**	.23*	.21*	.18*	.22*	.34**	.35**	.37**	.19*	.28**	.31**	.52**	.67**	1.00	
0.10	.14	.31**	.22*	.18*	.29**	.42**	.59**	.37**	.19*	.31**	.42**	.57**	.59**	.63**	1.00

Note. * $p < 0.05$, ** $p < 0.01$

The table demonstrates that inter-item association of Psychological inflexibility in pain scale. The total number of items of psychological inflexibility in the pain scale is sixteen. Therefore, results indicate that all items of psychological inflexibility in pain scale show a highly positive significant correlation with each other.

Table 4:

Convergent validity between Psychological inflexibility in the Pain Scale and subscales of Hospital Anxiety Depression Scale (N=120):

Variable	PIPS	ANX	DEP
PIPS22*	.05*
ANX	.22*		
DEP	.05*		

Note. * $p < 0.05$, ** $p < 0.01$

This Table 04 suggests the association within PIPS and hospital anxiety depression scale. As observed in the table, psychological inflexibility substantially positively associates with anxiety ($r = .22^*$) and also substantial connection depression ($r = .05^*$). It is confirmed that the convergent validity of the scales is comparatively significant because both scale measures are the same construct.

Table 5:

Divergent validity between Psychological inflexibility in Pain Scale and Generalized Self-Efficacy Scale (N=120):

Variable	PIPS	GSES
PIPS	-.18*
GSES	-.18*

Note. * $p < 0.05$, ** $p < 0.01$

This Table 05 reveals the association within the psychological inflexibility in pain scale and Generalized Self-Efficacy Scale. As mentioned in table, psychological inflexibility is substantially negatively associates with generalized self-efficacy ($r = -.18^*$). It is confirmed that the divergent validity of the scales is negatively significant because both scales measure different constructs.

DISCUSSION

This work integrates the PIPS and examines its psychometric properties. The purpose of this study is to eradicate linguistic obstacles from this tool (PIPS) so that it may be comprehended and utilized by the Pakistani sample. This purpose involved a translation and examination of the measure's psychometric properties, namely reliability, item's inter-relationship, convergent validity, and divergent validity. There were four stages to the translating process. Overall, the study's outcomes support to the PIPS's authenticity and responsiveness in the Urdu translation. The variable; PIPS has a coefficient alpha .87 for 16 items, indicating a highly trustworthy scale. The original tool's overall scale reliability was .89. Subscale avoidance has a reliability of .86, while this subscale's reliability in its original form was .90. Furthermore, the reliability score of the subscale fusion's original version was .75, while the examined reliability of a subscale fusion is .67.

Cronbach's alpha values for the subscales' internal consistency in the German version were $\alpha = .91$ for avoidance and $\alpha = .26$ for fusion. The Japanese version additionally demonstrated $\alpha = 0.85$ overall score (0.87 for pain avoidance and 0.68 for cognitive fusion). With regard to pain avoidance, it was 0.48 and for cognitive fusion, it was 0.54 for each of the 12 items in the test-retest correlation. According to the original PIPS version, the results point to the Urdu version's high reliability. The sixteen (16) items that make up the PIP Scale. The inter-item correlation of all sixteen items was investigated. The results of the investigation point to a highly substantial correlation.

Using the HADS' subscales, convergent validity of PIPS was examined. A noteworthy positive association has been observed between the PIPS and the anxiety subscale. Furthermore, there is a positive low connection with the depression subscale. The Generalized Self-Efficacy Scale was used to examine the divergent validity of PIPS. The findings demonstrated a statistically significant negative connection between GSES and PIPS. The results from the study of German translation indicate most notable associations was recorded between Avoidance and the CPAQ which was $r = -.81$, Fusion with the CPAQ subscale Pain willingness ($r = -.55$), TSK ($r = .58$), and PCS ($r = .56$). PIPS-J pain avoidance ($r = 0.58$) and PIPS-J cognitive fusion ($r = 0.45$) with the Acceptance and Action Questionnaire-II Japanese and the Cognitive Fusion Questionnaire- J, respectively, showed criterion validity in the Japanese version.

These data suggested that the PIPS is valid as well as reliable when utilized by Pakistani and Urdu-speaking populations. The PIPS Urdu version corresponds to plenty of patients, including those suffering from headaches, hepatitis, cancer, and bone and muscle discomfort. This tool

can assist other medical practitioners as well as psychologists and psychiatrists as they develop productive treatment strategies. Additionally, it promotes collaboration among the medical community and the psychiatric community.

This instrument can be utilized for research purposes as well, particularly for pre- and post-testing in intervention studies. Also, this can be used to figure out the life satisfaction, socialization, relationship satisfaction, communication, and job satisfaction of individuals who experience pain. There is a great deal of need to address the mental health of individuals experiencing pain. This tool in the Urdu language would be valuable in streamlining this process.

LIMITATIONS AND SUGGESTIONS

There are a few drawbacks to this scientific study that should be noted. The generalizability of the study is quite limited as data was only collected from the city of Sialkot, Pakistan. To address this issue, other cities should be taken into consideration for data gathering. Another limitation is that there's a chance that results contain a gender bias. Due to gender imbalance among participants, where there were more women than males, the results may not be as applicable as they may be due to this gender gap. Future studies should aim for a more fair representation of both genders to improve the robustness of conclusions linked to gender.

CONCLUSION

The scale was found to be an accurate as well as trustworthy way to assess Pakistani patients' psychological inflexibility experiencing pain. To determine the degree to which the results can be applied to other patients and circumstances, additional investigation is needed. Future studies ought to concentrate on analysing the scale's sensitivity to modifications in therapy and its capacity to forecast treatment results. The study emphasizes how critical it is to culturally modify evaluation instruments so that community members may effectively use and find them relevant. The results of this study have significant ramifications for researchers and clinicians involved in pain management in Pakistan and other culturally comparable settings.

REFERENCES

1. Barke, A., Riecke, J., Rief, W., & Glombiewski, J. A. (2015). The Psychological Inflexibility in Pain Scale (PIPS) – validation, factor structure and comparison to the Chronic Pain Acceptance Questionnaire (CPAQ) and other validated measures in German chronic back pain patients. *BMC Musculoskeletal Disorders*, 16(1).
2. Chou, W, P., Yen, C, Liu, T,. (2015). Predicting Effects of Psychological Inflexibility/Experiential Avoidance and Stress Coping Strategies for Internet Addiction, Significant Depression, and Suicidality in College Students: A Prospective Study. *Int. J. Environ. Res. Public Health* 2018, 15, 788. <https://doi.org/10.3390/ijerph15040788>
3. Figueiredo, D.V., Alves, F. & Vagos, P. Psychological inflexibility explains social anxiety over time: a mediation analyses with a clinical adolescent sample. *Curr Psychol* (2023). <https://doi.org/10.1007/s12144-023-04650-w>
4. Levin, E., MacLane, C., Daflos, S., Seeley, J., Hayes, C., Biglan, A., Pistorello, J., Examining psychological inflexibility as a transdiagnostic process across psychological disorders. *J Contextual Behav Sci.* 2014 Jul;3(3):155-163. doi: 10.1016/j.jcbs.2014.06.003.
5. Manning, K., Kauffman, B., Garey, L., & Zvolensky, M, J. (2022) "Associations of Psychological Inflexibility with Exercise Self-Efficacy and Fatigue Severity among Individuals Seeking Treatment for Weight-Related Behaviors," *Health Behavior Research: Vol. 5: No. 4.* <https://doi.org/10.4148/2572-1836.1155>
6. Mumford, D. B., Tareen, I. A. K., Bajwa, M. A. Z., Bhatti, M. R., & Karim, R. (1991). The translation and evaluation of an Urdu version of the Hospital Anxiety and Depression Scale. *Acta Psychiatrica Scandinavica*, 83(2), 81–85. <https://doi.org/10.1111/j.1600-0447.1991.tb07370>.
7. Nagasawa, Y., Shibata, A., Fukamachi, H., Ishii, K., Wicksell, R. K., & Oka, K. (2021). The Psychological Inflexibility in Pain Scale (PIPS): Validity and Reliability of the Japanese Version for Chronic Low Back Pain and Knee Pain. *Journal of Pain Research*, Volume 14, 325–332. <https://doi.org/10.2147/jpr.s287549>
8. Ruiz, F, J,. (2014). Psychological inflexibility mediates the effects of self-efficacy and

- anxiety sensitivity on worry. *Span J Psychol.* 2014;17:E3. doi: 10.1017/sjp.2014.3.
9. Shakeel, A., Irshad, M. ., & Ameer, E. (2023). Exploring the Influence of Psychological Inflexibility on Depression, Anxiety, Self-Efficacy, and Gender Disparities among Individuals with Chronic Illnesses. *Pakistan Journal of Gender Studies*, 23(2), 1–21. Retrieved from <https://www.socialsciencejournals.pjgs-ws.com/index.php/PJGS/article/view/706>
 10. Som, D (2022). Dark Side of Psychological Inflexibility. <https://medium.com/psychology-simplified/the-dark-side-of-psychological-inflexibility-ae52b9b14a53>
 11. Tabassum, U., Rehman, G., Schwarzer, R., & Jerusalem, M. (2003). Urdu self-efficacy. *Userpage.fu-Berlin.de*. <http://userpage.fu-berlin.de/~health/urdu.htm>
 12. Uğur, E., Kaya, Ç. & Tanhan, A. Psychological inflexibility mediates the relationship between fear of negative evaluation and psychological vulnerability. *Curr Psychol* 40, 4265–4277 (2021). <https://doi.org/10.1007/s12144-020-01074-8>
 13. Wicksell, R. K., Renofält, J., Olsson, G. L., & Melin, L. (2006). Avoidance and fusion - central components in pain related disability? Development and preliminary validation of the Psychological Inflexibility in Pain Scale.
 14. Wicksell, R. K., Renöfält, J., Olsson, G. L., Bond, F. W., & Melin, L. (2008). Avoidance and cognitive fusion - Central components in pain-related disability? Development and preliminary validation of the Psychological Inflexibility in Pain Scale (PIPS). *European Journal of Pain*, 12(4), 491–500. <https://doi.org/10.1016/j.ejpain.2007.08.003>
 15. Xiaoyu, Y., Xinhan, X., Ling, C., Shimin, C., Mark, A., & Shuling, Gao,. (2022, October). Associations between psychological inflexibility and mental health problems during the COVID-19 pandemic: A three-level meta-analytic review. <https://www.sciencedirect.com/science/article/pii/S0165032722011211>