



## **Assessing the Azerbaijani Professional Identity Scale for Counselors: An Exploration of Relationships with Professional Identity, Mental Well-Being, Job Satisfaction, and Psychological Distress**

Fuad Asadov, Cinare Kazımzade, Nigar Asgerova, Narınj Rustamova, Ulviyya Nahmatova, Elnur Rustamov.

Psychology Scientific Research Institute, Azerbaijan

### **Abstract**

This study introduces the Azerbaijani adaptation of the Professional Identity Scale for Counselors (PISC), exploring its psychometric properties among 206 school counselors in Azerbaijan. Utilizing Confirmatory Factor Analysis (CFA), the scale's original four-dimensional structure was validated, aligning closely with its intended design. Reliability analyses across both subscales and the overall scale demonstrated high levels of consistency, underscoring the tool's robustness. Criterion-related validity was established through meaningful correlations with mental well-being, job satisfaction, and psychological distress, aligning with anticipated directions. Notably, psychological distress was found to mediate the relationships between professional identity and both mental well-being and job satisfaction, highlighting the complex interplay between professional identity, psychological health, and workplace satisfaction among counselors. This study not only confirms the reliability and validity of the Azerbaijani PISC but also sheds light on significant associations that underscore the importance of professional identity in the mental health and job satisfaction of school counselors.

**Keyword.** Professional identity for counsellors; job satisfaction; mental wellbeing; distress

### **Introduction**

The importance of school psychologists is understood better every day in the world. Scientific evidences show that school psychologists are extremely important in school (Crespi, 2020). According to research, when school psychologists work in prevention, intervention, assessment, diagnosis diversity, equity and inclusion, measurement, methodology, statistics and professional issues the quality of education in schools is much better (Volpe, 2022). For example, it is obviously that suicides has been widely spread among adolescents. Considering, suicide is contagious, to prevent this situation, school psychologists must have extensive knowledge and be able to apply it in schools (O'Neil, 2020).

Our professional identity reflects who we are and how we behave professionally. This occurs through socialization. We create a professional identity by looking to our more experienced colleagues. Compliance with the person's professional identity criteria is especially important for people working in the fields of medicine and psychology. For this reason, psychologists need to know the criteria of their professional identity and adapt to it (Schubert S, 2023). Although many studies and articles have been published on diseases and problems in the field of psychology and medicine, sometimes we cannot see enough of their effects in practice. The reason for this is that although psychologists and health professionals have scientific knowledge, they cannot be effective because they do not have a good command of their professional identities. Therefore, psychologists need to gain a professional identity in order to provide great benefits to society (Klijitmans, 2017). Establishing a professional identity is very important. The development of a robust professional identity not only fosters resilience and well-being (Chandran et al., 2019; Cullum et al., 2020; Monrouxe, 2010; Mavor et al. 2014) but also positions individuals to recognize and appreciate the significance of their own efforts. This cultivated identity validates and justifies the challenges they encounter, directing their focus towards, and possibly even celebrating, the purpose inherent in their work. Professional identity goes beyond being a mere tool for creating competent and effective psychologists; instead, it plays a pivotal role in shaping the essence of a school psychologist. This grounding in professional identity anchors psychologists to the meaningfulness of their journeys, encouraging them to derive coherence from their roles and work, along with a sustained awareness of their purpose and significance. Professional identity encompasses attitudes, beliefs, experiences, ideals, professional engagement, aspirations for advancement, and adherence to ethical codes within a specific career (Tinkler et al. , 2018). Acting as a tool, professional identity empowers professionals to practice with confidence, both ethically and practically. A strong professional identity enhances self-efficacy and resilience in the face of job pressures and demands. Moreover, a well-defined professional identity can contribute to potential professional autonomy and is associated with higher levels of perceived integration (Franco & Tavares, 2013). On the other hand, a lack of professional identity has been linked to poor retention in some professions and is considered a reason for turnover (Wald, 2015). For this purpose, special programs should be created and education and training activities should be organized (Barnhoorn, 2019).

Many studies have shown a link between depression and stress associated with having a professional identity. For example, we know that nurses work in a stressful work environment. However, a study conducted in China states that strengthening the professional identity of nurses may be beneficial in managing depression, anxiety and stress (Wang Y, 2017). Even during the Covid-19 pandemic, it was found that there is a negative correlation between having a professional identity and stress levels of medical workers (Zhao, 2021). It is clear that working with a team in a stressful environment significantly reduces anxiety levels. The reason for this is that a person forms his professional identity by observing his teammates. The better a person creates his professional identity, the lower his anxiety level will be (Monrouxe, 2017).

One of the areas where we can best observe the relationship between professional identity and well-being is the school environment where teachers work. Because in recent years, a lot of research has been done and new methods have been found on how to better deal with students and pupils. It can be better observed that teachers master these methods, learn and apply the innovations of their profession. Researches show that the level of happiness of teachers who learn new things, are capable, and have a high professional identity is better. Teachers who feel happy are also able to develop their professional identity better (Zhao, 2022). Another study conducted on school employees shows that the more professional identity people have, the more motivated they are to improve themselves in their field, the more energetic they are, and the they don't experience burnout. This shows that there is a significant positive correlation between professional identity and well-being (Cece, 2022).

Another Canadian study found that nurses who are more professional perform their work better and feel better about themselves. At the same time, it shows that when a person knows that he can fulfill the

requirements of his professional identity in a workplace that meets the criteria, he is more productive and feels good in his work (Boateng, 2019).

### **The present study**

There are more than 3000 school psychologists in Azerbaijan. Especially in recent times, the holders of this specialty have increased. Previously, there was one school psychologist in the school, but in recent times this number has been two or three. True, this is sometimes insufficient for schools with more than 1000 students. Considering all these issues, it can be thought that additional support and psychological assistance should be provided to school psychologists. Considering all of the above, we can come to the conclusion that school psychologists should know their professional identity, but there is no test to measure the professional identity of school psychologists operating in Azerbaijan. Therefore, there is a gap in this regard, and we do not know how familiar school psychologists are with their professional identity and which criteria of professional identity they have difficulty meeting. Since all these things are not known, any work shown for their development is spontaneous, and it is not known what is the problem and what needs to be fixed. But there is a Professional Identity Scale in Counseling test in the world and it measures professional identity. It is widely used in the world and has been adapted to many countries, but it has not been adapted to Azerbaijan.

## **Methods**

### **Participants**

This study involved a total of 206 school counselors who were employed in various educational institutions. The participants varied in marital status, educational background, years of employment, and the number of counselors in their respective schools. Regarding marital status, the majority of the participants were married (n = 128, 62.1%), while 37.9% (n = 78) were single. In terms of educational background, most participants held a Bachelor's degree (n = 167, 81.1%), followed by those with Master's degrees (n = 34, 16.5%), and a minority with PhDs (n = 5, 2.4%). The participants also varied in their years of employment. A segment of the participants had less than one year of employment (n = 34, 16.5%), 25.7% (n = 53) had 2-3 years of experience, 8.3% (n = 17) had 4-5 years, and the largest group had more than six years of experience (n = 102, 49.5%). Concerning the number of counselors in the schools, 54.9% (n = 113) of the schools had one counselor, 40.3% (n = 83) had two counselors, and a small fraction had more than two counselors (n = 10, 4.8%). The characteristics of the participants are summarized in Table 1 below.

**Table 1. Participants' characteristics**

	N	%
<i>Marital status</i>		
Married	128	62.1
Single	78	37.9
<i>Educational status</i>		
Bachelor degree	167	81.1
Master degree	34	16.5
PhD	5	2.4
<i>How many years of employment</i>		
Less than one year	34	16.5
2-3 years	53	25.7

4-5 years	17	8.3
more than six year	102	49.5
<i>How many counselors in the school</i>		
One	113	54.9
Two	83	40.3
More than two	10	4.9

### Measures

The Professional Identity and Values Scale (PIVS). The PIVS (Healey, 2009) was developed. The PIVS consisted of 16 items (I am able to distinguish the counseling philosophy from the philosophy of other mental health professions (e. g., counseling psychology, social work, and psychiatry)). The PIVS asks participants to respond to each item on a 6-point Likert-type scale ranging from 1 (strong disagreement) to 6 (strong agreement). Cronbach's alpha of this scale is 0.80.

Depression, Anxiety and Stress Scale - 21 items (DASS - 21) was prepared by Lovibond (1995). The 21-item scale was collected in three sub-dimensions: depression (e.g., I found it difficult to work up the initiative to do things), anxiety (e.g., was worried about situations in which I might panic and make a fool of myself ), and stress (e.g., I found myself getting agitated). The DASS-21 assesses symptoms by using a 4-point Likert scale. (0 = did not apply to me at all and 3 = applied to me very much or most of time) Cronbach alpha internal consistency reliability coefficient in clinical sample  $\alpha = 0.87$  for the depression subscale,  $\alpha = 0.85$  for the anxiety subscale, and  $\alpha = 0.81$  for the stress subscale.

The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) was designed by Warwick and Edinburgh Universities(2006). This scale is a scale of 14 positively worded items for assessing a population's mental wellbeing(e.g., I have been feeling relax). WEMWBS using 4-point Likert scale. ( 1= I totally disagree and 4= I totally agree). A Cronbach's alpha score of 0.89 (student sample) and 0.91 (population sample) suggests some item redundancy in the scale.

Job Satisfaction Scale (Hackman and Oldham 1975) is a widely used tool to measure an individual's job satisfaction. Job satisfaction scale consists of 14 items, such as the nature of management in the workplace. Participants respond to each statement on a 5-point Likert-type scale, ranging from 1 ("It does not satisfy me at all") to 5 ("It satisfies me very much"). Cronbach's alpha of this scale is 0.95.

### Data Analysis

The primary aim of this study was to evaluate the psychometric attributes of the Azerbaijani Professional Identity Scale for Counselors (PISC), focusing on its structural validity, reliability, criterion-related validity, and predictive validity. The evaluation of structural validity was undertaken through Confirmatory Factor Analysis (CFA) utilizing maximum likelihood estimation methods. An extensive investigation of various fit indices was performed, including the chi-square ( $\chi^2$ ) to degree of freedom (df) ratio, Comparative Fit Index (CFI), Incremental Fit Index (IFI) and Standardized Root Mean Square Residual (SRMR). To ascertain the scale's internal consistency, we computed Cronbach's alpha, McDonald's omega, and Guttman's lambda coefficients. Furthermore, this study aimed to explore the criterion-related validity by examining the relationships between the PISC scores and measures of mental wellbeing, job satisfaction, and psychological distress through correlational analyses. Additionally, the study utilized a mediation analysis, specifically model 4 of the PROCESS macro as formulated by Hayes (2018), to probe the intermediary role of psychological distress in the nexus between professional identity, as gauged by the PISC, and mental wellbeing/job satisfaction.

## Results

The analysis focused on the factor loadings and descriptive statistics for the Azerbaijani Professional Identity Scale for Counselors (PISC), encompassing dimensions such as Professional Knowledge, Professional Competency, Attitude toward Profession, and Engagement in the Counseling Profession. The scale items demonstrated significant factor loadings, indicating strong item contributions to their respective factors. Further validation was provided by the model's fit indices. The chi-square test yielded  $\chi^2(98, N = 206) = 341.91$ , with  $p < .001$ , and a  $\chi^2/df$  ratio of 3.48, establishing the model's statistical significance. Additionally, the model exhibited robust fit as evidenced by several indices: Comparative Fit Index (CFI) at 0.914, Incremental Fit Index (IFI) at 0.914 with the Standardized Root Mean Square Residual (SRMR) standing at 0.074. Professional Knowledge was assessed with six items, showing factor loadings ranging from .71 to .78, all significant at the  $p < .001$  level. The mean scores for these items varied, with Item 6 showing the highest mean ( $M = 3.99$ ,  $SD = 1.63$ ) and Item 4 the lowest ( $M = 2.76$ ,  $SD = 1.48$ ). Professional Competency included three items, with factor loadings from .82 to .94, again significant at  $p < .001$ . The highest mean score was observed for Item 9 ( $M = 4.57$ ,  $SD = 1.54$ ), demonstrating a strong agreement with the item's statement. For the Attitude toward Profession dimension, items showed factor loadings above .86, significant at  $p < .001$ . Item 10 had the highest mean score ( $M = 4.58$ ,  $SD = 1.59$ ), with skewness and kurtosis indicating a distribution leaning towards more positive attitudes. Engagement in Counseling Profession was measured by four items, with factor loadings between .84 and .91. These items presented mean scores ranging moderately high, suggesting a positive engagement within the profession. For a detailed overview of the factor loadings and descriptive statistics, see Table 2 below.

**Table 2. Factor loadings and descriptive statistics for Azerbaijani PISC**

Dimension	Item	Factor loading	Mean	SD	Skewness	Kurtosis
Professional Knowledge	Item 1	.71**	3,76	1,39	-,38	-,89
	Item 2	.77**	3,25	1,43	-,02	-1,23
	Item 3	.78**	3,06	1,52	,17	-1,20
	Item 4	.72**	2,76	1,48	,40	-1,06
	Item 5	.77**	3,29	1,60	,04	-1,26
	Item 6	.72**	3,99	1,63	-,46	-1,00
Professional Competency	Item 7	.82**	4,26	1,58	-,70	-,70
	Item 8	.89**	4,24	1,34	-,70	-,28
	Item 9	.94**	4,57	1,54	-,99	-,06
Attitude toward Profession	Item 10	.86**	4,58	1,59	-1,08	-,03
	Item 11	.88**	4,26	1,49	-,76	-,37
	Item 12	.89**	4,54	1,53	-,95	-,18
Engagement in Counseling Profession	Item 13	.84**	3,67	1,62	-,29	-1,15
	Item 14	.83**	3,70	1,66	-,22	-1,24
	Item 15	.89**	3,80	1,60	-,26	-1,14
	Item 16	.91**	3,93	1,62	-,41	-1,02

Note. \*\*  $p < .001$

The reliability of the Azerbaijani Professional Identity Scale for Counselors (PISC) was rigorously assessed using several indices to ensure the consistency and stability of the measurement across its dimensions. The analysis revealed high reliability coefficients across the board, reinforcing the scale's credibility and utility in evaluating professional identity among counselors. The overall PISC exhibited

exceptional reliability, with Cronbach's alpha at .952, McDonald's omega at .951, and Guttman's lambda 6 at .967, indicating robust internal consistency for the scale as a whole. These findings suggest that the PISC is a reliable tool for measuring the professional identity of counselors in Azerbaijan. Professional Knowledge showed substantial reliability, with Cronbach's alpha at .881, McDonald's omega at .882, and Guttman's lambda 6 at .875. These results affirm the consistency of the items within this dimension. Professional Competency reported Cronbach's alpha at .910, McDonald's omega at .913, and Guttman's lambda 6 at .879, further underscoring the scale's reliability in assessing this crucial aspect of professional identity. Attitude toward Profession yielded Cronbach's alpha and McDonald's omega both at .905, with Guttman's lambda 6 at .867, highlighting the stable measurement of counselors' professional attitudes. Engagement in Counseling Profession was also highly reliable, with Cronbach's alpha and McDonald's omega both at .921, and Guttman's lambda 6 at .905, indicating the effectiveness of these items in capturing counselors' engagement levels.

These reliability coefficients underscore the Azerbaijani PISC's robustness and consistency in measuring the multifaceted aspects of professional identity among counselors. The detailed reliability statistics for each dimension are presented in Table 3 below.

**Table 3. Reliability coefficients for Azerbaijani PISC**

	Cronbach $\alpha$	McDonald $\omega$	Guttman $\lambda_6$
Overall PISC	.952	.951	.967
Professional Knowledge	.881	.882	.875
Professional Competency	.910	.913	.879
Attitude toward Profession	.905	.905	.867
Engagement in Counseling Profession	.921	.921	.905

The criterion-related validity of the Azerbaijani Professional Identity Scale for Counselors (PISC) was examined through correlation analyses with variables critical to the counseling profession: mental well-being, job satisfaction, and psychological distress. The analyses yielded significant correlations, suggesting that higher scores on the PISC and its dimensions are meaningfully associated with better mental well-being and job satisfaction, and inversely related to psychological distress. The Overall PISC scores demonstrated positive correlations with mental well-being ( $r = .328, p < .001$ ) and job satisfaction ( $r = .400, p < .001$ ), while showing a negative correlation with psychological distress ( $r = -.332, p < .001$ ). These findings indicate that a stronger professional identity as measured by the PISC is associated with higher levels of mental well-being and job satisfaction, alongside lower levels of psychological distress.

Professional Knowledge was positively correlated with mental well-being ( $r = .244, p < .001$ ) and job satisfaction ( $r = .332, p < .001$ ), and negatively correlated with psychological distress ( $r = -.320, p < .001$ ). This suggests that the knowledge aspect of professional identity plays a significant role in these areas. Professional Competency showed similar trends, with positive correlations with mental well-being ( $r = .297, p < .001$ ) and job satisfaction ( $r = .335, p < .001$ ), and a negative correlation with psychological distress ( $r = -.241, p < .001$ ), highlighting the importance of feeling competent in one's professional role. The Attitude toward Profession dimension correlated positively with mental well-being ( $r = .329, p < .001$ ) and job satisfaction ( $r = .411, p < .001$ ), and negatively with psychological distress ( $r = -.284, p < .001$ ). This underscores the value of having a positive professional attitude. Lastly, Engagement in Counseling Profession also showed positive correlations with mental well-being ( $r = .313, p < .001$ ) and job satisfaction ( $r = .345, p < .001$ ), and a negative correlation with psychological distress ( $r = -.301, p < .001$ ), indicating that engagement is crucial for counselors' psychological well-

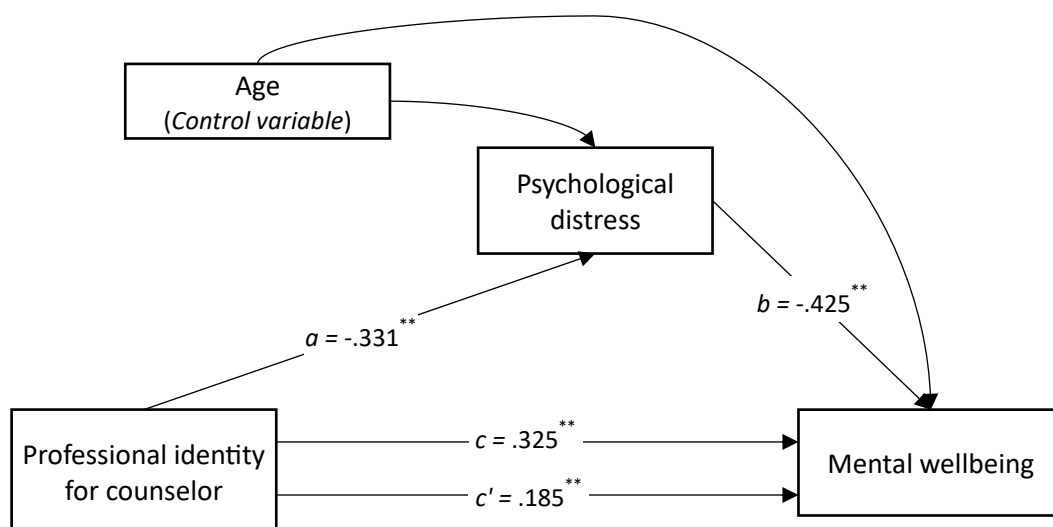
being and satisfaction with their job The detailed correlation coefficients for each variable are presented in the Table 4.

**Table 4. Criterion-related validity of the PICS**

Variable	Mental wellbeing	Job satisfaction	Psychological distress
Overall PISC	.328**	.400**	-.332**
Professional Knowledge	.244**	.332**	-.320**
Professional Competency	.297**	.335**	-.241**
Attitude toward Profession	.329**	.411**	-.284**
Engagement in Counseling Profession	.313**	.345**	-.301**

Note. \*\*  $p < .001$

The investigation also delved into the potential mediating effect of psychological distress within the linkage between professional identity and mental wellbeing, as depicted in Figure 1. To evaluate the mediation impact, bootstrap analyses were conducted, which indicated that psychological distress indeed served as a significant mediator in this relationship. The bootstrap coefficient was calculated to be .140, with a 95% confidence interval stretching from .082 to .209, confirming the mediation's statistical significance. Moreover, a direct and statistically significant association was identified between professional identity and psychological distress ( $\beta = -0.331, p < 0.001$ ), highlighting a clear link between these variables. Similarly, the analysis revealed a robust connection between psychological distress and mental wellbeing ( $\beta = -.425, p < 0.001$ ), further substantiating the scale's predictive validity in these contexts.



*Figure 1. Predictive validity of Azerbaijani PISC*

The study further explored the role of psychological distress as a mediator in the relationship between professional identity and job satisfaction, as illustrated in Figure 2. Bootstrap analysis was employed to determine the effect of mediation, demonstrating that psychological distress significantly mediated this relationship. The bootstrap coefficient was established at .061, with a 95% confidence interval ranging

from .015 to .120, affirming the mediation's statistical significance. Additionally, a statistically significant direct relationship was observed between psychological distress and job satisfaction ( $\beta = -0.185, p < 0.001$ ), elucidating a direct linkage between these factors.

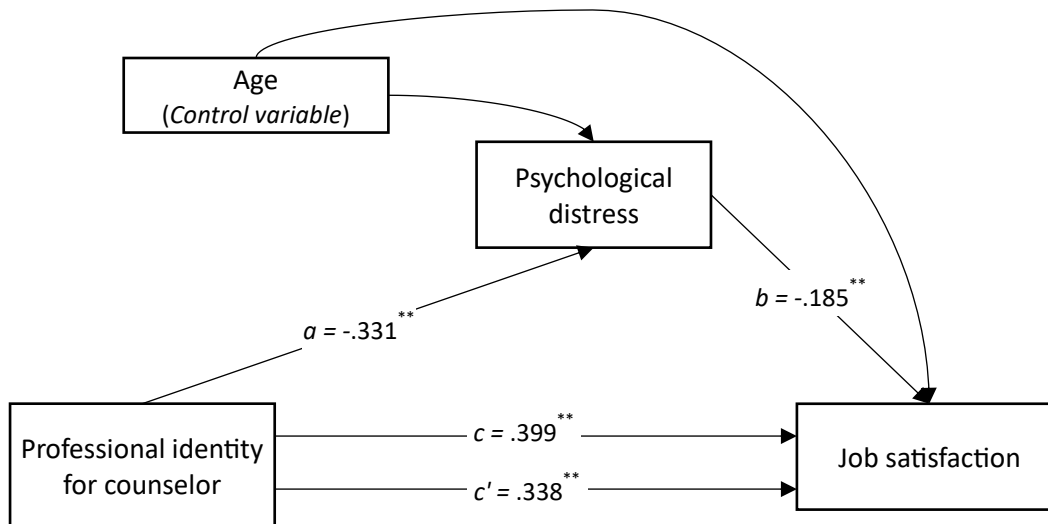


Figure 2. Predictive validity of Azerbaijani PISC

## Discussion

This research is dedicated to investigating the impact of professional identity on mental well-being, stress, anxiety, depression level and job satisfaction within the context of school psychologists in Azerbaijan. The special significance of this study lies not only in the choice of Azerbaijani school psychologists as participants but also in pioneering the integration of the scale into our society and validating its application.

This result suggests that a higher professional identity might prevent students from experiencing psychological distress in a high-stress situation (Wang et al., 2019), which partially supports the statement that a low professional identity increases the consumption of psychological resources and aggravates stress and psychological maladjustment (Hao et al., 2020). This result suggests that a higher professional identity might prevent students from experiencing psychological distress in a high-stress situation (Wang et al., 2019), which partially supports the statement that a low professional identity increases the consumption of psychological resources and aggravates stress and psychological maladjustment (Hao et al., 2020). This result suggests that a higher professional identity might prevent students from experiencing psychological distress in a high-stress situation (Wang et al., 2019), which partially supports the statement that a low professional identity increases the consumption of psychological resources and aggravates stress and psychological maladjustment (Hao et al., 2020). This result suggests that a higher professional identity might prevent students from experiencing psychological distress in a high-stress situation (Wang et al., 2019), which partially supports the statement that a low professional identity increases the consumption of psychological resources and aggravates stress and psychological maladjustment (Hao et al., 2020). This result suggests that a higher professional identity might prevent students from experiencing psychological distress in a high-stress situation (Wang et al., 2019), which partially supports the statement that a low professional identity increases the consumption of psychological resources and aggravates stress and psychological maladjustment (Hao et al., 2020).



The findings indicate that a heightened sense of professional identity may serve as a protective factor against psychological distress in high-stress situations, aligning with the notion that a diminished professional identity contributes to increased utilization of psychological resources and exacerbates stress and maladjustment, as proposed by Hao et al. (2020) and partially supported by the study of Wang et al. (2019). A heightened level of professional identity is associated with reduced psychological distress, whereas school psychologists harboring dissatisfaction with their profession tend to experience heightened negative emotions. These may manifest as complaints and fatigue in their career pursuits, a sense of bewilderment regarding their future, or a lack of clear life plans, thereby increasing their susceptibility to psychological challenges. Consequently, this study introduces a novel perspective, suggesting that the cultivation and enhancement of professional identity could prove advantageous for individuals pursuing counseling roles in promoting mental health in schools (Wang et al., 2019).

Discussions have arisen regarding the favorable impacts of professional identity on individuals, encompassing positive aspects such as a positive self-image/ self-perception, contentment in their professional roles, a sense of belonging, and acknowledgment of professional competence (Sharbaugh 2009, Jourdain & Chenevert 2010, Vlieghe et al. 2011).

### **Limitation**

Although, how meticulously we do our research, there are still some limitations. One of these is about gender equality. Since most school psychologists in Azerbaijan are women, gender equality was disrupted in our study. Moreover, most of the psychologists in our research only had undergraduate degrees. Maybe different results could have been obtained in participants who completed their master's and doctorate degrees. Moreover, most of the participants did not receive supervision. It would be better if this limitation is corrected in future research. One of the limitations was that almost all of the participants were from Baku, the capital of Azerbaijan.

### **Conclusion**

As a result of our research, the professional identity scale in counseling (PISC) was successfully adapted to Azerbaijan and its validity was ensured. School psychologists in Azerbaijan can easily use this scale. Moreover, according to our research, professional identity has a mediating role on depression, anxiety, stress, job satisfaction and psychological well-being. When the perception of professional identity increases, depression, anxiety and stress decrease, and job satisfaction and psychological well-being increase.

### **References**

- [1] Boateng, G. O., Schuster, R. C., & Boateng, M. O. (2019). Uncovering a health and wellbeing gap among professional nurses: situated experiences of direct care nurses in two Canadian cities. *Social Science & Medicine*, 242, 112568. <https://doi.org/10.1016/j.socscimed.2019.112568>
- [2] Cece, V., Martinent, G., Guillet-Descas, E., & Lentillon-Kaestner, V. (2022). The Predictive Role of Perceived Support from Principals and Professional Identity on Teachers' Motivation and Well-Being: A Longitudinal Study. *International Journal of Environmental Research and Public Health*, 19(11), 6674. <https://doi.org/10.3390/ijerph19116674>
- [3] Chandran, L., Iuli, R. J., Strano-Paul, L., & Post, S. G. (2019). Developing "a way of being": deliberate approaches to professional identity formation in medical education. *Academic Psychiatry*, 43, 521-527. <https://doi.org/10.1007/s40596-019-01048-4>
- [4] Crespi, T. D., & Alicandro, M. L. (2020). School psychologists consulting in the schools: Comment on Gullette et al.(2019). <https://doi.org/10.1037/amp0000590>



- [5] Cullum, R. J., Shaughnessy, A., Mayat, N. Y., & Brown, M. E. (2020). Identity in lockdown: supporting primary care professional identity development in the COVID-19 generation. *Education for Primary Care*, 31(4), 200-204. <https://doi.org/10.1080/14739879.2020.1779616>
- [6] Franco, M., & Tavares, P. (2013). The influence of professional identity on the process of nurses' training: an empirical study. *Leadership in Health Services*, 26(2), 118-134.
- [7] Jourdain, G., & Chênevert, D. (2010). Job demands–resources, burnout and intention to leave the nursing profession: A questionnaire survey. *International journal of nursing studies*, 47(6), 709-722. <https://doi.org/10.1016/j.ijnurstu.2009.11.007>
- [8] Kluijtmans, M., De Haan, E., Akkerman, S., & Van Tartwijk, J. (2017). Professional identity in clinician-scientists: brokers between care and science. *Medical education*, 51(6), 645-655. <https://doi.org/10.1111/medu.13241>
- [9] Mavor, K. I., McNeill, K. G., Anderson, K., Kerr, A., O'reilly, E., & Platow, M. J. (2014). Beyond prevalence to process: the role of self and identity in medical student well-being. *Medical education*, 48(4), 351-360. <https://doi.org/10.1111/medu.12375>
- [10] Monrouxe, L. V. (2010). Identity, identification and medical education: why should we care?. *Medical education*, 44(1), 40-49. <https://doi.org/10.1111/j.1365-2923.2009.03440.x>
- [11] Monrouxe, L. V., Bullock, A., Tseng, H. M., & Wells, S. E. (2017). Association of professional identity, gender, team understanding, anxiety and workplace learning alignment with burnout in junior doctors: a longitudinal cohort study. *BMJ open*, 7(12), e017942. <https://doi.org/10.1136/bmjopen-2017-017942>
- [12] Munir, M. B., Sharbaugh, M. S., Thoma, F. W., Nisar, M. U., Kamran, A. S., Althouse, A. D., & Saba, S. (2017). Trends in hospitalization for congestive heart failure, 1996–2009. *Clinical Cardiology*, 40(2), 109-119. <https://doi.org/10.1002/clc.22638>
- [13] O'Neill, J. C., Marraccini, M. E., Bledsoe, S. E., Knotek, S. E., & Tabori, A. V. (2020). Suicide postvention practices in schools: School psychologists' experiences, training, and knowledge. *School psychology*, 35(1), 61. <https://doi.org/10.1037/spq0000331>
- [14] Schubert, S., Buus, N., Monrouxe, L. V., & Hunt, C. (2023). The development of professional identity in clinical psychologists: A scoping review. *Medical Education*, 57(7), 612-626. <https://doi.org/10.1111/medu.15082>
- [15] Tinkler, L., Smith, V., Yiannakou, Y., & Robinson, L. (2018). Professional identity and the Clinical Research Nurse: A qualitative study exploring issues having an impact on participant recruitment in research. *Journal of advanced nursing*, 74(2), 318-328. <https://doi.org/10.1111/jan.13409>
- [16] Volpe, R. J., Chafouleas, S. M., Gonzalez, J., Ardoin, S., & Jimerson, S. R. (2022). The science of school psychologists: Developing a standard definition. *Journal of school psychology*, 94, A1-A12. <https://doi.org/10.1016/j.jsp.2022.06.006>
- [17] Wald, H. S. (2015). Professional identity (trans) formation in medical education: reflection, relationship, resilience. *Academic Medicine*, 90(6), 701-706. <https://doi.org/10.1097/acm.0000000000000731>
- [18] Wald, H. S. (2015). Professional identity (trans) formation in medical education: reflection, relationship, resilience. *Academic Medicine*, 90(6), 701-706. <https://doi.org/10.1080/0142159x.2018.1464133>
- [19] Wang, L., Yang, Y., Zhu, J., Xie, H., Jiang, C., Zhang, C., ... & Huang, F. (2019). Professional identity and mental health of rural-oriented tuition-waived medical students in Anhui Province, China. *BMC medical education*, 19, 1-10. <https://doi.org/10.1186/s12909-019-1603-1>
- [20] Wang, Y., & Zhang, B. (2017). Impact of personality trait and professional identity on work-related depression, anxiety and irritation among Chinese nurses. *Southeast Asian J Trop Med Public Health*, 48(2), 447-454.



- [21] Wang, Y., & Zhang, B. (2017). Impact of personality trait and professional identity on work-related depression, anxiety and irritation among Chinese nurses. *Southeast Asian J Trop Med Public Health*, 48(2), 447-454. <https://doi.org/10.1002/nop2.902>
- [22] Xing Tan, T., Wang, Y., Hao, S. W., & Li, Y. (2021). Female adopted Chinese-American youth's sense of exclusion and short-and long-term adjustment. *American journal of orthopsychiatry*, 91(5), 671.
- [23] Zhao, S., Dong, Y., & Luo, J. (2022). Profiles of teacher professional identity among student teachers and its association with mental health. *Frontiers in Public Health*, 10, 735811. <https://doi.org/10.3389/fpubh.2022.735811>