to religious reality involves transmitting truths and values through the adult's life and words. Initially, this takes the form of proclaiming and evangelizing, through which the child comes to know God, who reveals His love through Christ.

This proclamation bears the characteristics of a kerygma, grounded in selected biblical texts that describe events where God reveals His presence. The first and most significant moment of prayer is the child's contact with the Word of God, listening to the message together, which serves as an invitation to respond—a conversation with the One who speaks. Prayer, therefore, must be rooted in the kerygma. In this way, the child will not merely associate prayer with a routine obligation imposed by parents, where morning and evening prayers are recited out of habit, often as memorized phrases lacking meaningful context or understanding.

In the catechetical practice at the CGS, prayer follows the reading of biblical texts. Through a brief narrative in their own words, the catechist directs the children's attention to the central theological themes, prompting their reflection with questions such as, "What do you think this means?" or "What is Jesus trying to tell us?" This invites children to contemplate on the message, which they can continue during their independent work, drawing, or personal prayer.

The prayer formulas suggested for memorization, often drawn from the Psalms, are carefully selected to align with the kerygma of the Word of God proclaimed during catechesis. Before being encouraged to offer prayers of petition, children are allowed to express the joy of being with God and experiencing His love. At this early age, children often do not experience a sense of lack, so their prayers of petition usually arise from imitating adults. Introducing prayers of petition too early can reinforce magical thinking and contribute to a distorted image of God as a wizard or magician. Additionally, prayer should not be used as a disciplinary tool, which is a common practice among adults struggling with a child's behavior.

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Conclusions

Walesa's research is consistent with other studies suggesting that children generally hold anthropomorphic conceptions of God and that their ability to grasp more abstract notions of God depends on their cognitive development, particularly on moving beyond the stage of concrete thinking. Although research by Walesa and religious education at CGS confirm a progressive development of individual religiosity, where the understanding of truths about the nature of God becomes more abstract, symbolic, internalized, and individualized, rather than concrete, literal, absolutist, and externally adopted as cognitive development progresses—they also challenge the common perception that children's religious thinking is purely irrational. Instead, the study suggests that the magical thinking children display in matters of faith is not merely a cognitive limitation but a potent heuristic tool for environmental learning and creativity.

This model of religiosity also acknowledges that feelings "are not inherently religious but become so through their reference to God" (Tatala, 2000, p. 47). These feelings are shaped by religious consciousness and the attribution of meanings and significance to lived experiences, which, in the CGS program, are supported by the teaching content and the use of symbols and parables. Other significant components of religiosity include religious decision-making, community bonds among believers, religious practices, morality, experiences, and forms of creed. Decisionmaking in a religious context involves evaluating situations, acquiring necessary knowledge, and making choices within the intellectual, emotional, and volitional realms. This process entails not only the individual's relationship with God but also concerns their interaction with the world in light of transcendent reality. Thus, religious decision-making is tied to religious morality, which governs relationships with people, objects, and phenomena by distinguishing between criteria of good and evil that provide the basis for making choices and motivate actions. The psycho-social dimension of religiosity is characterized by a sense of connection to a community of believers, which is initially fostered within the family

and further developed through participation in the Eucharistic liturgy, parish activities, and religious education, such as religion classes and retreats. This communal bond creates the opportunity for building new religious experiences, facilitates the development of religious awareness and attitudes, the expression of religious feelings, and active participation in religious practices.

Research on the moral development of preschoolers indicates that they understand what it means to experience pain and suffering and recognize actions that cause these as wrong. When explicitly asked to explain why hitting others or taking their possessions is wrong, children often cite the harm and suffering that would be inflicted as the main reasons (Davidson et al., 1983). However, translating these moral intuitions into consistent behavior is complex (Smith et al., 2013). In general, preschoolers' moral reasoning is not a strong predictor of whether they will actually behave in a moral or prosocial manner (Tan et al., 2021). This research suggests that adult authority plays a key role in encouraging children to act in accordance with their moral reasoning. While children may arrive at certain moral conclusions with some adult guidance, they rarely treat these conclusions as binding moral imperatives (Harris, 2023).

Religion does not create morality for children or adults; rather, moral intuitions exist independently of religion, with many moral values being cross-cultural and universal, regardless of religious affiliation or lack thereof. However, religion influences morality in various ways. First, it reinforces universal moral intuitions related to care and justice, directing them toward specific, though not all, ends. Second, religion ties these intuitions to values that are not universally shared, such as social order, self-control, and purity, thereby creating a more restrictive moral framework. Third, religion can promote moral absolutism and strictness by grounding these intuitions in deontological norms of behavior. Finally, religiosity may enhance conformity to religious norms and authorities, which can sometimes undermine moral autonomy and lead to prioritizing religious beliefs over moral ones (Saroglou, 2021).

In the religious education and prosocial development of children, it is necessary to consider the interaction between (a) the child's individual

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characteristics, including age, psychological traits, religious socialization, and prior experiences with physical and psychological realities; (b) the qualities of the adults introducing the child to the faith, particularly the nature and status of their relationship with the child; and (c) the content and quality of the religious knowledge being taught. These factors, which are psychologically significant for the development of mature religiosity, are taken into account— as demonstrated in our comparative analysis—by the CGS model of religious and prosocial education.

Walesa's research findings on the development of religiosity in children, despite civilizational changes and the increasing secularization of society, highlight aspects that should be taken into account in the context of family upbringing. Since they concern development that proceeds through specific stages, they can be considered immutable. CGS, on the other hand, is a program that takes into account the religious needs of young children in all the areas studied by Walesa. Although there is a lack of scientific research on the effects of religious education according to CGS, it should be emphasized that there are numerous notes from catechists observing children's behavior at CGS, as well as statements and drawings which indicate that the content and method of signs/parables used by Cavalletti support religious development, including moral development.

CGS offers many innovative solutions to support the holistic religious development of a child, including moral development, but requires appropriate preparation of adults (parents, catechists) and the environment. It requires further analysis and research.

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References

- Bornstein, M. H., Putnick, D. L., Lansford, J. E., Al-Hassan, S. M., Bacchini, D., Bombi, A.S., Chang, L. et al. (2017). 'Mixed Blessings': Parental Religiousness, Parenting, and Child Adjustment in Global Perspective. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 58*(8) (August), 880–92. https://doi.org/10.1111/jcpp.12705
- Cavalletti, S., & Gobbi, G., (1965–1971). *Io sono il buon Pastore. Sussidi per la cate-chesi dei bambini, I-V anno, Guida per il catechista* [I am the Good Shepherd. Resources for children's catechesis, Years I–V, Guide for the catechist]. Coletti.
- Cavalletti, S. (1979). *Il potenziale religioso del bambino. Descrizione di un'esperienza con bambini da 3 a 6 anni* [The Religious Potential of the Child. Description of an experience with children aged 3 to 6]. Città Nuova.
- Cavalletti, S. (2015). La catechesi del buon Pastore, Antologia di testi scelti a cura di Francesca e Patrizia Cocchini [The Catechesis of the Good Shepherd, Anthology of Selected Texts edited by Francesca and Patrizia Cocchini]. EDB.
- Cavalletti, S. (1996). *Potenziale religioso tra i 6 e i 12 anni. Descrizione di un'esperienza* [The Religious Potential of the Child 6 to 12 Years Old]. Città Nuova.
- Davidson, P., Turiel, E. & Black, A. (1983). The Effects of Stimulus Familiarity on the Use of Criteria and Justifications in Children's Social Reasoning. *British Journal of Developmental Psychology, 1*(1), 49–65. https://doi.org/10.1111/j.2044-835X.1983.tb00543.x
- Davis, E. B., Moriarty, G. L. & Mauch, J. C. (2013). God Images and God Concepts: Definitions, Development, and Dynamics. *Psychology of Religion and Spirituality*, *5*(1), 51–60. https://doi.org/10.1037/a0029289
- De Giorgi, F., ed. (2013). *Montessori. Dio e il bambino e altri scritti inediti* [Montessori. God and the Child and Other Unpublished Writings]. Editrice La Scuola.
- Harris, P.L. (2022). Child Psychology in Twelve Questions. Oxford University Press.
- Kielian, A. (2024). Sakrament pokuty w Katechezie dobrego Pasterza zarys mistagogii według Sofii Cavalletti. [The Sacrament of Reconciliation Within the Catechesis of the Good Shepherd an Outline of Mystagogy According to Sofia Cavalletti]. *Studia Katechetyczne*, 20, 171–190. https://doi.org/10.21697/sk.2024.20.11
- Krippendorff, K. (2022). *Content analysis: An introduction to its methodology* (4th ed.). SAGE Publications.
- Mahoney, A. (2021). *The Science of Children's Religious and Spiritual Development*. Cambridge University Press. https://doi.org/10.1017/9781108874342
- Markeng, S. & Berglund, J. (2023). In the Child's Best Interest: Analyzing Pedagogical Approaches among Teachers of the Qur'an in Norway. *Religion & Education*, December, 1–21. https://doi.org/10.1080/15507394.2023.2286166
- Montessori, M. (1922). *I bambini viventi nella chiesa. Note di educazione religiosa* [Living Children in the Church. Notes on Religious Education]. Alberto Morano Editore.

Supporting religious and pro-social education in the Catechesis of the Good Shepherd within the cognitive-developmental framework of integral religious development (pp. 519–538)

- Montessori, M. (1949). *La Santa messa spiegata ai bambini* [The Mass Explained to Children]. Garzanti.
- Montessori, M. (1931). La vita in Cristo [The Life of Christ in the Liturgical Year]. Stab. Tip. Ferri.
- Richert, R. A., Boyatzis, Ch. J. & King, P.E. (2017). Introduction to the British Journal of Developmental Psychology Special Issue on Religion, Culture, and Development. *British Journal of Developmental Psychology, 35*(1), 1–3. https://doi.org/10.1111/bjdp.12179
- Saroglou, V. (2020). *The Psychology of Religion*. Routledge. https://doi.org/10.4324/9781351255967
- Smith, C. E., Blake, P. R. & Harris, P. L. (2013). I Should but I Won't: Why Young Children Endorse Norms of Fair Sharing but Do Not Enforce Them. *PLOS ONE*, 8(3), e5910. https://doi.org/10.1371/journal.pone.0059510
- Surma, B. (2017). Koncepcja wychowania religijnego dziecka w myśli pedagogicznej Sofii Cavalletti. Geneza, założenia teoretyczne i recepcja. [The Concept of Religious Education of Child in the Pedagogical Thought of Sofia Cavalletti: Genesis, Theoretical Foundation and Reception]. Akademia Ignatianum w Krakowie. Wydawnictwo WAM.
- Tan, E., Mikami, A.Y., Luzhanska, A. & Hamlin, J. (2021). The Homogeneity and Heterogeneity of Moral Functioning in Preschool. *Child Development*, 92, 959–75. https://doi.org/10.1111/cdev.13458
- Tatala, M. (2000). *Rozwój uczuć religijnych dzieci przedszkolnych*. [The Development of Religious Feelings in Preschool Children]. KUL.
- Walesa, Cz. (2005). *Rozwój religijności człowieka, Tom I: Dziecko*. [The Development of Human Religiousness, Volume I: The Child]. KUL.
- Walesa, Cz., Tatala, M., & Rydz, M. (2023). *Rozwój religijności człowieka, Tom III:* Osoba dorosła [The Development of Human Religiousness, Volume III: The Adult]. KUL.

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Validation of the Career Planning Styles (SPK-21) tool

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Abstract

Research objectives and problem: The article focuses on the theoretical basis for the development and validation of the Career Planning Styles (SPK-21) tool. The aim was to design and evaluate the psychometric properties of a questionnaire for investigating the career planning styles of university graduates entering the labor market. The main research objective was formulated as the following question: What are the career planning styles of university students?

Research methods: The study was conducted in the 2023/2024 academic year. The Career Planning Styles questionnaire was distributed to students in two stages. First, a pilot study was carried out with 155 respondents, which enabled an initial psychometric validation of the tool. The main survey was then conducted among 665 university students.

Process of argumentation: The article begins with an introduction to the topic of professional careers in the modern world. Particular attention is paid to the issues of accelerating change and the growing complexity of the world, as well as their consequences for the labor market and career planning. This section also addresses factors that influence career planning decisions. The next part outlines the methodological assumptions of the research, including sample selection, research timeline, and the procedure for creating and validating the SPK-21 tool. The final part presents a summary of the tool's potential applications.

Research findings and their impact on the development of educational sciences: The analyses led to the development of the final version of the Career Planning Styles (SPK-21) questionnaire. Cronbach's alpha for its three dimensions: ordered style, flexible style, and dependent style was 0.726, 0.707, and 0.620, respectively.

Keywords:

career planning styles, labor market, students, psychometrics, research tools, SPK-21 questionnaire **Conclusions and/or recommendations:** The evaluation of the validity and reliability of the final version of SPK-21 was positive. The tool can be used to measure three styles of career planning, and the survey may be conducted individually or in groups.

Introduction

Changes in the labor market provide a starting point for reflections on career planning among young people (including university students). A review of the literature shows that young people entering secondary and higher education are likely to follow non-linear career paths. Different non-linear career models have been identified, including protean careers, kaleidoscope careers, portfolio careers, boundaryless careers, and zigzag careers (Jagielska, 2024a, 2024b; Piorunek, 2016). The theoretical basis for these models is rooted in today's social, economic, cultural, and political realities. Their common denominator is volatility, uncertainty, and the complex experiences associated with pursuing careers in a globalized world.

In addition, exposure to crises and unexpected events, both of which significantly affect the labor market, is becoming increasingly frequent. As a result, young people face many challenges: they must plan their careers in the context of change, uncertainty, and crisis. Technological advancements are reshaping the labor market, and the pace of these transformations is accelerating. It is difficult to predict which career path will allow a smooth entry into employment. On the one hand, careers today are often described as competence-based; on the other, specific qualifications remain indispensable (Jagielska, 2023; Kwiatkowski, 2023; Kwiatkowski, 2025). Reports also indicate that young people seek stable employment (Turska, 2020; Deloitte, 2025), while the instability of the labor market forces them to change professions and workplaces. Although many hope for a stable, linear career path, the reality of a complex and non-linear world makes this aspiration difficult to achieve. Young people therefore face challenging decisions regarding education and professional life (Cybal-Michalska, 2016; Jagielska, 2024a).

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The choice of career path is itself a complex process. It is determined not only by external factors—such as labor market conditions—but also by the family's socio-cultural and economic status, as well as internal factors including intellectual abilities, interests, and values (Czerwińska-Jasiewicz, 1997; Firkowska-Mankiewicz, 1999). These determinants form an interconnected whole, which makes it difficult to identify only one or two as decisive in career planning. Each factor matters, particularly in today's complex, non-linear world. Professional decisions and career planning are influenced not only by the socio-economic situation in a given country but also by family engagement in education and support (Jagielska, 2024a), social networks, and many other factors.

It seems impossible to develop a model that captures all these variables. Even if such a model were created, it would describe only an individual's situation at a particular moment in time. The world is changing so rapidly that building a model to represent this reality accurately is extremely difficult. Therefore, career planning models should aim to approximate reality as closely as possible, reflect existing trends, and take into account the fluid and complex circumstances of contemporary life. This study investigates the ways in which young people plan their careers, with the goal of identifying the styles that they adopt when preparing for their professional future. The issue is especially important because, in today's changing, complex, and non-linear world, career planning has become a real challenge that requires strategic thinking and individualized approaches. This article presents the procedure for developing and validating the original Career Planning Styles tool.

Methodological assumptions

The aim of the study was to conduct a psychometric analysis of the original tool called *Career Planning Styles*, intended as the basis for further research into the careers of university students. The main research objective was formulated as the following question: *What are the career planning styles of university students?* The study was carried out in the academic year 2023/2024. The *Career Planning Styles* survey questionnaire was

administered to students in two stages. First, a pilot study was conducted with 155 students from Polish universities, which allowed for the initial psychometric validation of the tool. The main survey was then conducted with 665 university students aged between 18 and 25. The sampling method used was convenience sampling (Johnson & Christensen, 2014; Leiner, 2016).

Development of the Career Planning Styles (SPK-21) tool

The original tool was designed for a qualitative evaluation of approaches to career planning among young people who are about to complete their education and enter the labor market. The tool was developed in stages. The first stage involved a literature review conducted to investigate issues related to the labor market and careers. Based on this analysis, a list of questionnaire items was composed, formulated as statements. The questionnaire items were designed in line with the guidelines described in relevant publications (Foddy, 1993; Nachmias & Nachmias, 2001).

Operationalization of the theoretical construct involved formulating statements that referred to different actions taken by university students to improve their chances of entering the labor market and pursuing their intended career paths. To this end, the literature on professional careers was analyzed to identify factors related to career decision-making. These included both external (systemic) conditions and individual factors (such as family background, immediate environment, and others).

The questionnaire items were therefore constructed to address:

- external factors (economic conditions, the labor market, social environment, etc.) which shape the context of career planning,
- 2. selected internal factors (interests, knowledge of specific professions, etc.) (Rożnowski, 2009), and
- 3. different career models (Bańka, 2016; Paszkowska-Rogacz, 2003; Rożnowski & Fortuna, 2020).

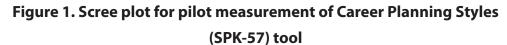
Actions that could be undertaken by individuals planning their professional future were also considered. A total of 57 items were formulated.

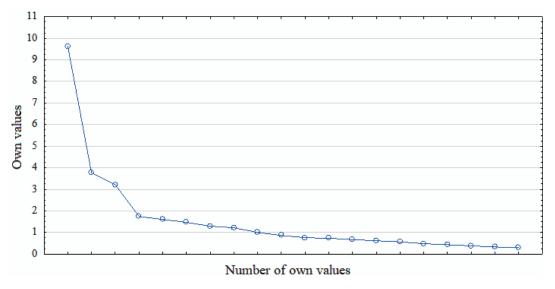
Responses were provided on a five-point scale: 1 – definitely not, 2 – rather not, 3 – hard to say, 4 – rather yes, 5 – definitely yes (Brzeziński, 2001; Brzeziński, 2019; Fronczyk, 2009). Instructions were developed to accompany the questionnaire, including information about the purpose of the study, anonymity, and the voluntary nature of participation (Aranowska, 2005).

Once the item list had been completed, it was reviewed by three expert judges (pedagogues), who examined both the questionnaire items and instructions. Their reviews were discussed, and suggested changes were incorporated. Following this, the pilot study was conducted to reduce the number of questions and produce the finalized measurement tool. This article presents the first stage of validation work, along with a more detailed psychometric analysis of the shortened final version.

SPK tool validation procedure

The initial attempts to evaluate reliability produced average results for the 57-item version of the tool. The validity assessment through factor analysis did not yield satisfactory outcomes either. The scree plot for this first version (SPK-57) is presented in Figure 1 below.



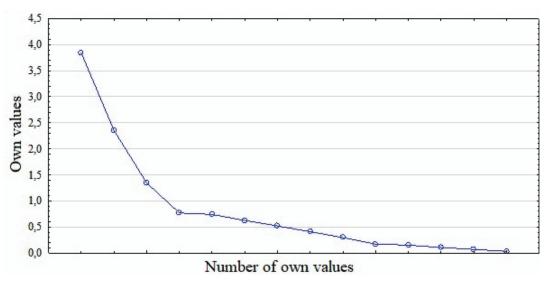


Source: Authors' own compilation

This analysis indicated the need to identify multiple scales within the tool. As many as nine factors had eigenvalues greater than 1.00. Based on the evaluation of eigenvalues and factor loadings, a decision was made to remove items with the lowest loadings, as well as those that reduced the overall reliability of the tool. This process reduced the number of items from 57 to 21, retaining only those with the strongest factor loadings and the highest reliability.

The shortened 21-item version was then subjected to further validation. Validity was analyzed using exploratory factor analysis. Principal axis factoring revealed that the tool identifies three main factors. The scree plot for the SPK-21 is presented in Figure 2. According to Cattell's criterion, three distinct factors can be identified.

Figure 2. Scree plot for pilot measurement of Career Planning Styles (SPK-21) tool



Source: Authors' own compilation

Cattell's criterion was supported by the Kaiser criterion in determining the number of factors to retain. Of the eigenvalues presented in Table 1, three are greater than 1.00.

Table 1. Eigenvalues for pilot measurement of Career Planning Styles (SPK-21) tool

Factor	Eigenvalue	Percentage of variance explained	
ractor	Ligetivatue	Total	Cumulative
1	3.84	3.84	18,29
2	2.36	6.20	29.51
3	1.35	7.54	35.91
4	0.77	8.31	39.58
5	0.74	9.05	43.12
6	0.62	9.68	46.09
7	0.52	10.20	48.57
8	0.41	10.61	50.52
9	0.30	10.91	51.93

Source: Authors' own compilation

Due to the above-mentioned aspects, it can be assumed that the tool has a three-factor scale structure. Factor loadings of the specific questionnaire items in relation to the three scales identified in the factor model are presented in Table 2. The results were subjected to Varimax rotation.

Table 2. Factor loadings for pilot measurement of Career Planning Styles (SPK-21) tool

Statements		Factors		
Statements	1	2	3	
1. I do not know the exact direction of my professional interests.	0.594			
4. I do not care where I will work.	0.577			
7. My education has been a sequence of accidental choices.	0.607			
10. Studying has never mattered to me, which is why I chose my faculty randomly.	0.615			
13. I do not like to think about the future; I prefer to live in the moment.	0.786			
16. I live in the moment; I do not think about the future.	0.779			
19. I am not concerned about building my network of contacts.	0.535			
2. I could adapt to changes in the labor market in my profession.		0.452		
5. I am ready to relocate to achieve my professional goal.		0.623		
8. I am open to working outside Poland.		0.780		
11. I can adapt to changing labor market conditions.		0.437		
14. I am aware that I will have to change workplaces.		0.396		
17. Achieving my professional goal is so important to me that leaving the country would not be a problem.		0.825		
20. I take part in international internships and programs to prepare for working abroad and in international teams.		0.505		
3. I do not know where to search for information about training required in my profession.			0.767	
6. I do not know exactly how long it will take me to achieve my career goal.			0.531	
9. I do not know what formal requirements I would have to meet to achieve my career goal.			0.722	
12. I cannot search for new information related to my professional interests on my own.			0.592	
15. Sudden legal changes connected with my profession would discourage me from changing my career goal.			0.399	
18. I do not know what my professional goal is, but I think I am able to manage my career.			0.535	
21. I would like to benefit from mobility schemes, but I am afraid I do not know the language well enough.			0.353	

Note: Factors analyzed were subject to Varimax rotation.

Source: Authors' own compilation

The results of the exploratory factor analysis were verified using the confirmatory model. The assignment of individual questionnaire items to the identified scales was based on the model shown in Tables 1 and 2. The confirmatory factor analysis revealed that the three-factor model fit the data well: $\chi^2(186) = 245.006$; p = 0.002, RMSEA = 0.044 (0.026–0.059), GFI = 0.848, AGFI = 0.814. Thus, the analyses conducted enabled identification of three final career planning styles: ordered, flexible, and dependent.

Table 3. Reliability analysis of pilot measurement of Career Planning

Styles (SPK-21)

Career Planning Style	No. of items	Cronbach's α
Ordered	7	0.793
Flexible	7	0.690
Dependent	7	0.690

Source: Authors' own compilation

The second stage of the psychometric validation of the Career Planning Styles questionnaire included an evaluation of its reliability. Using Cronbach's alpha, the reliability of each scale was analyzed. The summary of the analyses is presented in Table 3. The results show that the reliability of the scales ranged from 0.690 to 0.793, which indicates satisfactory reliability of the measurement. In addition, Cronbach's alpha values after the removal of 36 items from the tool are presented in Table 4. It can be observed that only in a few cases would the removal of items increase the reliability values.

Table 4. Reliability analysis of pilot measurement of Career Planning
Styles (SPK-21) after item removal

Statements		Cronbach's α after removal		
Statements	1	2	3	
1. I do not know the exact direction of my professional interests.	0.767			
4. I do not care where I will work.	0.784			
7. My education has been a sequence of accidental choices.	0.762			
10. Studying has never mattered to me, which is why I chose my faculty randomly.	0.768			
13. I do not like to think about the future; I prefer to live in the moment.	0.746			
16. I live in the moment; I do not think about the future.	0.753			
19. I am not concerned about building my network of contacts.	0.789			
2. I could adapt to changes in the labor market in my profession.		0.700		
5. I am ready to relocate to achieve my professional goal.		0.660		
8. I am open to working outside Poland.		0.613		
11. I can adapt to changing labor market conditions.		0.701		
14. I am aware that I will have to change workplaces.		0.708		
17. Achieving my professional goal is so important to me that leaving the country would not be a problem.		0.585		
20. I take part in international internships and programs to prepare for working abroad and in international teams.		0.694		
3. I do not know where to search for information about training required in my profession.			0.604	
6. I do not know exactly how long it will take me to achieve my career goal.			0.660	
9. I do not know what formal requirements I would have to meet to achieve my career goal.			0.616	
12. I cannot search for new information related to my professional interests on my own.			0.636	
15. Sudden legal changes connected with my profession would discourage me from changing my career goal.			0.669	
18. I do not know what my professional goal is, but I think I am able to manage my career.			0.649	
21. I would like to benefit from mobility schemes, but I am afraid I do not know the language well enough.			0.700	

Source: Authors' own compilation

The tool in this form—with 21 items formulated as statements evaluating three career planning styles—was used in the main study. The psychometric analysis conducted on a sample of 665 students is presented

later in this article. This analysis constituted the main part of the psychometric evaluation of the tool.

Psychometric evaluation of the final version of SPK-21

The final version of the tool designed to measure career planning styles was subjected to psychometric analysis. The sample consisted of 665 respondents. The confirmatory analysis corroborated the three-factor structure of the tool: $\chi^2(189) = 653.725$; p < 0.001, RMSEA = 0.061 (0.056–0.066), GFI = 0.906, AGFI = 0.885. The model showed a good fit with the data, although it should be noted that it did not reach the optimal fit values. This indicates room for further refinement of the tool. The fit indices for the final version were better than in the pilot study. Reliability analysis was also conducted for the three identified career planning styles. The Cronbach's alpha values for these styles are presented in Table 5 below. The SPK-21 tool can therefore be considered both valid and reliable.

Table 5. Analysis of reliability of Career Planning Styles (SPK-21)

Career Planning Styles	No. of Items	Cronbach's α
Ordered	7	0.726
Flexible	7	0.707
Dependent	7	0.620

Source: Authors' own compilation

The weakest scale was the dependent style, while the highest reliability was obtained for the ordered career planning style. The reliability coefficients for individual questionnaire items are presented in Table 6 below.

Table 6. Analysis of reliability of Career Planning Styles (SPK-21) after removal of items

Statements		Cronbach's α after removal		
Statements	1	2	3	
1. I do not know the exact direction of my professional interests.	0.708			
4. I do not care where I will work.	0.693			
7. My education has been a sequence of accidental choices.	0.666			
10. Studying has never mattered to me, which is why I chose my faculty randomly.	0.669			
13. I do not like to think about the future; I prefer to live in the moment.	0.670			
16. I live in the moment; I do not think about the future.	0.677			
19. I am not concerned about building my network of contacts.	0.729			
2. I could adapt to changes in the labor market in my profession.		0.712		
5. I am ready to relocate to fulfill my professional goal.		0.664		
8. I am open to working outside Poland.		0.618		
11. I can adapt to changing labor market conditions.		0.700		
14. I am aware that I will have to change workplaces.		0.745		
17. Fulfilling my professional goal is so important to me that leaving the country would not be a problem.		0.618		
20. I take part in international internships and programs to prepare for working abroad and in international teams.		0.710		
3. I do not know where to search for information about training required in my profession.			0.535	
6. I do not know exactly how long it will take me to fulfill my career goal.			0.565	
9. I do not know what formal requirements I would have to meet to fulfill my career goal.			0.494	
12. I cannot search for new information related to my professional interests on my own.			0.540	
15. Sudden legal changes connected with my profession would discourage me from changing my career goal.			0.584	
18. I do not know what my professional goal is, but I think I am able to manage my career.			0.587	
21. I would like to benefit from mobility schemes, but I am afraid I do not know the language well enough.			0.640	

Source: Authors' own compilation

In the final version, within the ordered style scale, item 19 proved to be the weakest. It can also be noted that removing items 14 or 21 would slightly improve the validity of the measurements, although the changes would be minimal. Evaluation of the validity and reliability of the final version of SPK-21 leads to the conclusion that the tool is accurate and can be used to measure the three career planning styles: ordered, flexible, and dependent.

Further analysis of the results made it possible to establish interpretation ranges. The raw values and corresponding standardized results (sten scores) are presented in Table 7 below. Sten scores in the range of 1–3 should be considered low, 4–7 moderate, and 8–10 high.

Table 7. Standardized values of Career Planning Styles (SPK-21)

Sten score		Raw Result	
Stell stole	Ordered	Flexible	Dependent
1	7–16	7–12	7–13
2	17–19	13-14	14-16
3	20–22	15–16	17–18
4	23–25	17–18	19–20
5	26–28	19–21	21–22
6	29–30	22–24	23–24
7	31–32	25–26	25–27
8	33	27–29	28–29
9	34	30–31	30–31
10	35	32–35	32–35

Source: Authors' own compilation

A high score for the ordered style means that individuals pursue their career paths with a specific goal in mind and aim to achieve it through deliberate action. Their actions are purposeful and focused on the chosen goal. Low scores refer to young people who act chaotically when planning their career future and lack a clearly defined career goal.

High scores for the flexible career planning style indicate individuals who can adapt to changing conditions when planning their career paths and are open to different possibilities. Those with low scores are characterized by inflexibility and difficulty adjusting to a changing environment. High scores for the dependent style refer to individuals who are able

to plan their careers, are development-oriented, and can independently search for information related to personal and professional growth. Low scores for this style describe people who cannot plan their career future independently and do not know what actions to take when choosing their career path.

The results for each career planning style are obtained by summing the responses given to the relevant statements. The SPK-21 statements corresponding to each style are presented in Table 8 below. The responses are assigned numerical values on a 5-point scale: definitely not – 1, rather not – 2, hard to say – 3, rather yes – 4, definitely yes – 5. It is worth noting that responses to some statements need to be re-coded by reversing the values: 1 becomes 5, 2 becomes 4, 4 becomes 2, and 5 becomes 1.

Table 8. Construction of Career Planning Styles (SPK-21)

Career Planning Styles	SPK-21 Statement Number
Ordered	1r, 4r, 7r, 10r, 13r, 16r, 19r
Flexible	2, 5, 8, 11, 14, 17, 20
Dependent	3r, 6r, 9r, 12r, 15r, 18r, 21r

r – reversed statements

Source: Authors' own compilation

The final version of the SPK-21 tool used to measure career planning styles is presented in Appendix 1 to this article. The tool can be used for both individual and group assessments. Completing the questionnaire takes up to 10 minutes. It is available in hard copy or as an online survey.

Conclusions and recommendations

The psychometric evaluation of the Career Planning Styles (SPK-21) tool presented here shows that the questionnaire is reliable and can be applied in research on career planning styles. The results obtained are

satisfactory. Cronbach's alpha for the specific styles is acceptable although some areas should be strengthened. This particularly applies to the dependent style, for which Cronbach's alpha is 0.620. Therefore, further refinement of the SPK-21 questionnaire would be worthwhile. The questionnaire can be used for both individual assessments and group studies. It may be incorporated into academic courses such as career counselling, human resource management, and career management. It can also be used to demonstrate how individuals may be supported in their career planning, and by careers offices to assist students in choosing a career path.

Limitations

The study has certain limitations. These include the method of sample selection. In this study, convenience sampling was used, which means that only those who were available and willing to participate were included.

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References

- Aranowska, E. (2005). *Pomiar ilościowy w psychologii* [Quantitative measurement in psychology]. Wydawnictwo Naukowe SCHOLAR.
- Bańka, A. (2016). *Psychologiczne doradztwo karier* [Career counselling psychology]. Wydawnictwo Stowarzyszenie Psychologia i Architektura.
- Brzeziński, J. (2019). *Metodologia badań psychologicznych* [Methodology of psychological research]. Wydawnictwo Naukowe PWN.
- Brzeziński, J. (Ed.). (2001). *Metodologia badań psychologicznych. Wybór tekstów* [Methodology of psychological research: A selection of texts]. Wydawnictwo Naukowe PWN.
- Cybal-Michalska, A. (2016). Młodzież w relacji do kariery jako "własności" zawodu albo "roli zawodowej" perspektywa funkcjonalno-strukturalna [Youth vs. career as the "property" of a profession or a "professional role" A functional and structural perspective]. *Studia Edukacyjne, 38,* 61–70.
 - https://doi.org/10.14746/se.2016.38.4
- Czerwińska-Jasiewicz, M. (1997). *Decyzje młodzieży dotyczące własnej przyszłości (uwarunkowania psychospołeczne)* [Youth decisions about their own future (psychosocial determinants)]. Oficyna Wydawnicza Wydziału Psychologii Uniwersytetu Warszawskiego.
- Firkowska-Mankiewicz, A. (1999). Zdolnym być... Kariery i sukces życiowy warszawskich trzydziestolatków [To be talented... Careers and life success of thirty-year-olds from Warsaw]. Wydawnictwo IFiS PAN.
- Foddy, W. (1993). Constructing questions for interviews and questionnaires: Theory and practice in social research. Cambridge University Press.
- Fronczyk, K. (2009). Psychometria [Psychometry]. Vizja Press & IT.
- Human Capital Trends 2025 | Raport Deloitte. (2025, April 9). https://www.deloitte.com/pl/pl/services/consulting/research/human-capital-trends-2025.html
- Jagielska, K. (2023). Kompetencje kluczowe w rozwoju przyszłej kariery zawodowej pokolenia Z a edukacja [Key competences for the future career development of Generation Z and education]. *Edukacja Ustawiczna Dorosłych, 2,* 25–35. https://doi.org/10.34866/155x-dn95
- Jagielska, K. (2024a). Znaczenie wsparcia rodziny w procesie konstruowania karier edukacyjno-zawodowych młodych dorosłych pokolenia Z [Importance of family support in planning educational and professional careers by young adults from Generation Z]. *Studia z Teorii Wychowania*, *15*(2[47]), 201–215. https://doi.org/10.5604/01.3001.0054.6572
- Jagielska, K. (2024b). Ścieżki edukacyjne a ścieżki zawodowe pokolenia Z [Educational pathways vs. the professional pathways of Generation Z]. In M. Piorunek, S. M. Kwiatkowski, & N. G. Pikuła (Eds.), *Praca Rynek pracy Kariera zawodowa: Implikacje teoretyczno-empiryczne* (pp. 49–64). Wydawnictwo UAM.

- Johnson, B., & Christensen, L. (2014). *Educational research: Quantitative, qualitative, and mixed approaches* (5th ed.). SAGE Publications.
- Kwiatkowski, S. (2025). Knowledge as a constitutive component of individual educational capital. *Studia z Teorii Wychowania*, *16*(1[50]), 9–20. https://doi.org/10.5604/01.3001.0055.0562
- Kwiatkowski, S. M. (2023). Employees' dilemmas in the contemporary labor market. *Labor et Educatio*, *11*, 11–23.
 - https://doi.org/10.4467/25439561LE.23.002.19207
- Leiner, D. J. (2016). Our research's breadth lives on convenience samples: A case study of the online respondent pool SoSci Panel. *Studies in Communication and Media*, *5*(4), 367–396.
 - https://doi.org/10.5771/2192-4007-2016-4-36769-134
- Nachmias, V., & Nachmias, D. (2001). *Metody badawcze w naukach społecznych* [Research methods in the social sciences] (E. Hornowska, Trans.). Wydawnictwo Zysk i S-ka. (Original work published 1981)
- Paszkowska-Rogacz, A. (2003). *Psychologiczne podstawy wyboru zawodu: Przegląd koncepcji teoretycznych* [The psychological basis of career choice: An overview of theoretical concepts]. Wydawnictwo KOWEZiU.
- Piorunek, M. (2016). Kariera według młodych, czyli nowy paradygmat kariery na dysonansowym rynku pracy [A career according to young people, or a new career paradigm in the dissonant labor market]. *Studia Edukacyjne, 38,* 83–95. https://doi.org/10.14746/se.2016.38.6
- Rożnowski, B. (2009). Przechodzenie młodzieży z systemu edukacji na rynek pracy w Polsce: Analiza kluczowych pojęć dotyczących rynku pracy u młodzieży [Transition of young people from the education system to the labor market in Poland: Analysis of key concepts of the youth labor market]. Wydawnictwo KUL.
- Rożnowski, B., & Fortuna, P. (Eds.). (2020). *Psychologia biznesu* [Psychology of business]. Wydawnictwo PWN.
- Turska, E. (2020). *Praca i kariera na globalnym rynku: Wyzwania i zagadnienia* [Jobs and careers in the global marketplace: Challenges and issues]. Difin.

Career Planning Styles (SPK-21) Questionnaire

Please indicate to what extent each of the 21 statements refers to you. You will always have 5 response options to choose from (definitely not, rather not, hard to say, rather yes, definitely yes). Read each statement and select to what extent it describes you. For each statement, select one response only. Remember, there are no right or wrong answers.

1.	. I do not know the exact direction of my professional interests.				
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
2.	I could adapt to	changes in the labo	or market in my prof	ession.	
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
3.	l do not know w	here to search for ir	nformation about tra	aining required in n	ny profession.
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
4.	I do not care who	ere I will work.			
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
5.	I am ready to rel	ocate to achieve my	professional goal.		
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
6.	I do not know ex	actly how long it w	vill take me to achiev	ve my career goal.	
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes

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7.	My education ha	s been a sequence (of accidental choices	5.	
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
8.	I am open to wor	king outside Polan	d.		
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
9.	I do not know wh	nat formal requirem	nents I would have t	o meet to achieve r	ny career goal.
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
10.	Studying has nev	ver mattered to me,	which is why I chos	se my faculty rando	mly.
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
11.	I can adapt to ch	anging labor marke	et conditions.		
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
12.	I cannot search fo	or new information	related to my profe	ssional interests or	ı my own.
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
13.	I do not like to th	ink about the futur	e; I prefer to live in	the moment.	
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
14.	I am aware that I	will have to chang	e workplaces.		
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes

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15.	Sudden legal changes connected with my profession would discourage me from changing my career goal.				
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
16.	I live in the moment; I do not think about the future.				
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
15.	Achieving my proaction a problem.	ofessional goal is so	important to me th	at leaving the cou	ntry would not be
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
18.	I do not know what my professional goal is, but I think I am able to manage my career.				
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
19.	I am not concerned about building my network of contacts.				
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
20.					
	I take part in international internships and programs to prepare for working abroad and in international teams.				
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes
21.	I would like to benefit from mobility schemes, but I am afraid I do not know the language well enough.				
	Definitely not	Rather not	Hard to say	Rather yes	Definitely yes