



Application of Education Managers and Students in Mental Health Education, Participation of Professional Technical Staff and Psychological Experts

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To cite this article: Collaborate, Current Science, Volume 5, No. 5-8, 2023, p. 29 – 63. - 0099-0001-2308-0305.

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Issn: 2667-9515

Barcode: 977266795001

Editors Group:

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Abstract

Teachers may use the system to create customized survey questions and then modify the design of the mental training platform for young kids based on the input received. This enables them to enhance the platform's suitability for the students' daily life. The absence of individuals with expertise in data technologies inside the mental training center at our universities is a significant contributing factor to the lack of development of a psychological crisis early warning system in higher education institutions. This team necessitates a collective set of competencies that include a comprehensive understanding of both physical and mental training knowledge, with specialized expertise in the field of big data technology. By implementing a university-based mental health



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education center that incorporates physical and mental training as well as data technology skills, we may optimize the use of data technology and address the limitations of conventional psychological early warning approaches. This unique material requires the involvement of competent technical professionals and psychological specialists, and it should be implemented in mental health education for university students of high caliber. Furthermore, it should undergo continuous development and enhancement. Given the existing deficiency in research and application capabilities of colleges and universities in this domain, it is imperative to enhance technology development proficiency and effectively address the obstacles associated with technology application by leveraging resource integration and other strategic approaches. Resource integration may be achieved via several means, including inter-university cooperation and collaboration between universities and enterprises. For instance, esteemed academic institutions has the capacity to undertake focused research endeavors pertaining to the utilization of artificial intelligence and big data in enhancing mental health education for university students, leveraging the synergistic amalgamation of their robust resources and expertise. By leveraging the collaboration between technical specialists and psychological experts, it is possible to address the shortcomings of universities in technology development and implementation. This collaborative effort may result in the creation of a technologically advanced platform that effectively caters to the mental health education requirements of university students. Furthermore, colleges and universities have the potential to establish technical collaborations with external companies or organizations that possess robust technical capabilities. By leveraging their expertise in the field of psychology and combining it with the technological advancements of these external institutions, they can facilitate the transformation of pertinent technological concepts into practical applications.

Keywords: *Education Administrators, Mental Health of Students, Application in Education, Professional Technical Staff, Participation of Psychological Experts in Education*



Introduction

According to the subsequent college, it is essential to address the mental health concerns of students by not only focusing on the advancement of early-stage technology platforms, but also by ensuring continuous technological maintenance and updates. This is crucial due to the individualized nature of students' mental health features. The use of artificial intelligence and big data technologies may effectively align with the evolving landscape of mental health education practices among university students. Colleges and universities often engage in the regular optimization of their college student mental health assessment system, aiming to enhance the alignment between the model and the data stored in the database. The current time represents a crucial stage in human evolution. At this juncture, university students exhibit heightened sensitivity and emotional volatility, making them hesitant to broach topics pertaining to psychological concerns and crises. Colleges and universities have implemented a psychological crisis early warning system with the purpose of providing support to students. Once the psychological status information of students is obtained, it is essential to prioritize the utmost security of this data and restrict the number of input ports for APP information. It is essential for counselors, classroom instructors, and members of psychological boards to adhere carefully to the principle of confidentiality in order to prevent any potential negative impact on kids.

This paper employs big data technology to address the limitations of conventional psychological crisis warning approaches in light of the prevalent occurrence of psychological crises among university students. The process involves the collection of six distinct dimensions of psychological early warning data, followed by the use of big data technologies to conduct analysis, research, and prediction on the acquired data. The mental health education center and instructors provide psychological therapies to kids based on the findings of their assessments. Simultaneously, a neural network model based on the Backpropagation (BP) algorithm is developed to forecast psychological crises. The performance of this model is then evaluated by comparing it with the commonly used gray prediction model. The findings indicate that the use of big data technology and BP neural network in a psychological crisis early warning system enables fast and precise assessment of students' psychological status. This is achieved by leveraging the timeliness of big



data technology, resulting in a remarkable prediction accuracy of 0.976. This demonstrates the soundness of the paradigm and underscores the imperative need of doing research. Furthermore, taking into account the prevailing issues in the present educational administration of university students, this paper puts forward six measures derived from the findings of the investigation.

1. *Establishing a multi-level link feedback early warning system,*
2. *Encouraging students to participate actively in the construction of psychological crisis early warning,*
3. *Optimizing the application mode of technology,*
4. *Developing a team of psychological talents with big data technology,*
5. *Integrate data technology development resources and*
6. *To ensure data security, to ensure the mental health and physical and mental safety of university students of the mental health education center.*

The evaluation of the quality and effectiveness of college teaching psychology management, as well as its influence on the growth of college teaching psychology management, is a crucial criterion within the overarching framework of colleges and universities. Nevertheless, the current psychological management system used by conventional colleges and universities is encountering difficulties in fulfilling the demands for innovation posed by the contemporary talent development model in higher professional education. The establishment of a novel micro-level educational institution necessitates the use of psychological management strategies, organizational structure, procedural frameworks, and technological advancements to effectively accommodate the intermediate and macro levels. Nonetheless, a number of discrepancies exist within the internal and external administrative systems of Vocational Colleges in China. These include subpar administrative efficiency, the broad application of administrative authority, insufficient specialization in administrative psychology management, and an irrational administrative and organizational structure. This article examines the ways in which colleges are adapting their administration of psychology and implementing university reforms to align with the features of



the digital era. This article presents the collaborative psychology management innovation network model of colleges and universities, drawing upon the collaborative innovation theory in the field. The proposed model integrates principles from psychology management theory and applies research on collaborative innovation in higher education institutions. This model aims to broaden the scope of innovation network theory and explores the development and implementation of an evaluation index system for assessing students' satisfaction with the teaching of psychology management in colleges and universities. Through the process of engaging with many sources of information, such as reading books and engaging in discussions with both educators and other students, individuals may acquire knowledge and deepen their understanding of a given subject matter. A survey on student satisfaction was developed for the purpose of assessing psychological management instruction at the college level. The experimental results indicate a significant rise of around 31% in teacher satisfaction as compared to the period prior to the implementation of innovation and reform measures. In its first stages, it has the potential to bring about innovation and reform, cater to the requirements of students, and facilitate the enhancement of teaching psychology management quality. The purpose of this introductory section is to provide a brief overview of the topic at hand and In recent years, there has been a growing focus on the investigation of internal psychological management inside vocational institutions.

Nevertheless, the majority of individuals continue to be engaged in frontline roles, with little emphasis on theoretical investigation (Ling et al., 2021). The aforementioned experiences exhibit a limited perspective and lack the necessary depth to adequately engage with the theoretical aspects of guide practice. The author selected the study subject "Research on psychology management innovation in Higher Vocational Colleges" (Zheng et al., 2021c) due to the existing disparity between theoretical advancements and practical requirements, as well as the characteristics of the field. The objective of this article is to explore the implementation of internal psychology management in colleges and identify the theoretical framework that can facilitate the continuous development of higher professional education. Additionally, the aim is to enhance the existing theory of higher vocational education in order to maximize its effectiveness (Zheng et al., 2021a).



Findings

Vocational colleges achieve sustained growth through reintegration and allocation of high-quality social resources via the use of innovative management strategies in the field of psychology (Sayaf et al., 2021). According to Li et al. (2021), this proposition offers a novel framework for the advancement of higher vocational education. It contributes to the theoretical foundation of higher vocational education and presents a fresh theoretical paradigm for the establishment of a contemporary university system inside Chinese colleges and universities. In contrast to general education, higher vocational education has a stronger correlation with the market and business sectors, displaying less reliance on governmental support, heightened adaptability, and an increased propensity for system innovation. Hence, recognizing the significance of implementing psychological management practices in Vocational Schools and establishing a novel psychological management model within the context of the contemporary university system has substantial theoretical value. The ongoing progress in computer technology and evolving pedagogical approaches are crucial elements that underpin the sustained growth of online education. According to Adarkwah (2021), there has been research conducted on the use of computer-assisted knowledge teaching platforms as a means of implementing educational reforms in university settings. Information technology is a significant component of the broader field of information technology and plays a crucial role in the process of incorporating information technology into education. Consequently, the instruction of knowledge has emerged as a pivotal aspect of educational reform (Zheng et al., 2021b). The imparting of knowledge via teaching has remarkable benefits and significant potential, making it a crucial component in enhancing the standard of education and training (Kang et al., 2022). According to Sun M, it is recommended that educators thoroughly contemplate the prudent selection and use of information within the framework of instructional design. Additionally, they should carefully examine the interplay between knowledge and other components of teaching in a complete and systematic manner. The study conducted by Ramírez-Montoya et al. (2021) presents a proposed design for an educational innovation process tailored to university students pursuing a specialization in health sciences. Additionally, the document



delineated some approaches that might facilitate evaluation and cooperative creativity. Presently, there are several established institutions in prominent nations throughout the globe, such as colleges, departments, research institutes, and school labs, among others. These entities are dedicated to providing interdisciplinary vocational education, with a focus on addressing the demands of the contemporary workforce and the global market. Developed a system that facilitates the establishment of a versatile framework for educational activities. The present study investigates the research conducted by academics in the field of psychology management, with a specific focus on the experiences and expertise of British and French higher education professionals. The study explores several aspects such as psychology management, innovation, and tolerance, as discussed in the work of Zhang et al. (2022). The University of Psychology's administration provided clarification about the primary roles of the British and French national authorities in upholding educational standards, as outlined in the works of Li et al. (2017) and Gümüş et al. (2020). In contemporary times, there exists a notable need for educational programs focused on digital literacy and English language proficiency. According to Thorson K, multiple participants, including traditional news producers, personal media users, social connections, advertisers, and computer algorithms, engage in similar "curation" processes within personal networks (Akhtar et al., 2020; Sarid, 2021; Huang et al., 2022).

Literature Review

The identification of rivalry, overlap, and convergence across different media streams is of utmost importance in comprehending contemporary media exposure and its influence. The approach used by the author introduces new perspectives on study subjects such as polarization, selectivity, and accidental exposure within the realms of discourse, participation, and the conceptual framework of computational methodologies. The efforts of several educators and scholars in the field of education often cultivate ingenuity in the realm of chemistry instruction. Numerous endeavors of this kind have been documented throughout several sub-disciplines within the field of chemistry. Nevertheless, there is a scarcity of research documenting attempts to reproduce findings that have been previously published (Abbas et al., 2020; Khokhar et al., to 2020, b; Irfan et al., 2022). The



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study conducted by Magnano et al. (2021) delves into the topic of reproducibility in scientific research, examining several challenges associated with replicating prior studies. The ramifications of this endeavor on educators' creative teaching and learning initiatives are discussed by Goldsby et al. (2021). The primary focus of Goel and Jones' (2016) perspective on educational equity for developing bilingual students has always been on the role of children and their activities within the social context. The study conducted by Picone et al. (2021) utilizes Ophelia's own writings and the works of many writers, including both present and past pupils, to examine the potential of individuals' dynamic bilingual practices in fostering innovation within the field of bilingual education theory and practice. This paper has significant theoretical and practical relevance, as well as research value. The significance of this article resides in its emphasis on the need to redefine the notion of management, with a particular focus on incorporating "Humanistic" values. This entails advocating for the cultivation of personal inclusivity and the fostering of students' individuality, while also striving to maximize their potential. Another significant development is the introduction of management tools. On one side, the prominence of research is seen in the use of research and legal remedies. National institutions play a pivotal role in shaping the education model and framework via legislative measures. They exert influence on schools by providing guidance and direction in accordance with the established model or framework. Furthermore, these institutions adapt the professional and career environments to suit changing socio-economic conditions as needed. Furthermore, it is necessary to distribute and promote the legislation inside the educational institution, elucidate the rights and responsibilities of students, and encourage educators and learners to use legal measures in safeguarding their lawful rights and interests. One significant aspect is the advancement of management technology. This article proposes the use of a collaborative innovation model inside colleges and universities, aiming to leverage management theory in order to facilitate innovation in college administration and drive educational change. The core framework for university psychology management innovation in the digital era encompasses the methods used for university education reform. The fundamental paradigm for implementing innovative management strategies in university psychology encompasses three levels: macro, meso, and micro (Wang et al., 2021).



Currently, stakeholders in state higher vocational colleges express their dissatisfaction primarily in the following areas: students exhibit discontent with the faculty, unemployed faculty and staff express dissatisfaction with the salary system and performance appraisal system, and the secondary education department's intervention or inaction is also a source of concern. Rashid et al. (2021) discuss many sources of discontent, including the functional department's unhappiness, the dissatisfaction of the government and enterprises over the awareness and capacity of higher vocational schools to serve the local community in 2021, as well as dissatisfaction with the competent departments of higher vocational schools. Furthermore, the inspiration phase aims to provide ideas and approaches for addressing challenges inside and outside higher vocational institutions (Saloviita & Pakarinen, 2021). To address the aforementioned discontent, vocational schools should use innovative approaches to psychology management, with the primary strategy being psychology management innovation. According to Sarwar et al. (2018), psychology management innovation in technology may be broadly classified into two categories. The first category involves the implementation of established psychology management methods, processes, structures, or technologies. The second category pertains to the development of novel psychology management models and approaches, which promote self-renewal and advancement in the field. Thirdly, during the phase of proposing and evaluating creative strategies, the inventive strategy is formulated and its viability is assessed based on the inspiration. The utilization of advanced enterprise experience and foreign vocational education, as well as the implementation of advanced psychology management methods, processes, structures, and technologies in vocational schools within our country, should not be restricted solely to the internal and external rights and interests of these educational institutions. According to Sarwar et al. (2019), in order to ensure the rapid advancement of students in vocational high schools, it is necessary for higher vocational colleges to engage in comprehensive deliberation and evaluation led by experts prior to the implementation of new projects. This process serves to enhance the viability of the program. The implementation plan phase involves the actualization of the inherent value of the psychological management innovation phase (Sarwar & Khan, 2015). The determination of profits and losses associated with different interests remains elusive until the full extent of innovation's efficacy is shown. Consequently, the adoption of psychological management innovation is often impeded (Sarar et al., 2022). Hence, it is imperative for vocational schools to



receive support from internal and external stakeholders when implementing substantial innovations. This support primarily manifests in two key aspects: firstly, the establishment of a specialized organization dedicated to managing psychological aspects of innovation, led and operated by the school's principal. The second approach involves effectively organizing and promoting the collective efforts of professors and staff, while also using staff organization as a means to address real-world challenges (Farooq et al., 2019; Waheed et al., 2020; Sarwar et al., 2022). In the fifth step, the process of conceptualizing, defining, and distributing serves to provide significance to and validate the implementation of innovative practices in the field of psychological management. The primary objective of this invention is to describe the experience of effectively executing psychological management innovation and identify any patterns or regularities that might provide guidance for future practice. The objective of this study is to propose a collaborative innovation model for the management of psychology departments at universities. Collaborative innovation entities inside the collaborative innovation network of higher education institutions foster the establishment of trust, reciprocity, recognition, and other forms of organizational connections via their exchanges and interactions. According to Firmansa et al. (2020), the attainment of the college collaborative innovation objective may be facilitated by the establishment of an enhanced collaborative partnership. For instance, educational institutions that foster stronger "interpersonal connections" exhibit a heightened level of confidence among their collaborative innovation counterparts. This inclination towards more robust and enduring collaboration leads to a reduction in scientific collaboration expenses, mitigation of collaboration-related risks, and an overall increase in the efficacy of collaborative endeavors (Jia, 2021). A higher degree of interpersonal connection is more likely to foster subsequent collaborative endeavors. Consequently, the stakeholders involved in collaborative innovation inside colleges and universities diligently strive to cultivate a more robust and mutually beneficial "relationship." Figure 2 depicts the conceptual framework illustrating the collaborative approach to managing innovation in the field of psychology within university settings.

2. Examination of business conduct and objectives. Businesses have a crucial role in evaluating the worth of innovative accomplishments. The realization of genuine innovation necessitates the transformation of technical items into commodities. Enterprises choose for university collaborative innovation as a strategic approach to attain success in market competitiveness and ensure sustainable growth. The



objective of optimization is to consistently engage in research and development activities aimed at creating novel goods and technologies with the purpose of minimizing production expenses and maximizing financial gains. Hence, it is essential for university-industry cooperation in innovation to be driven by market forces and to maintain a harmonious equilibrium between the supply and demand of ideas and technologies between the academic laboratory and the market, achieved via institutional linkages. The collaborative innovation mode between colleges is perceived as a strategic and systematic project that encompasses the planning of diverse advantages, the exploration of internal advantages through theoretical frameworks, and the practical application of interdisciplinary combinations. This mode involves the engagement of external business teams, technology, and knowledge, facilitated by collaborative innovation platforms or cooperative projects. Its primary objective is to cultivate high-quality engineering and technical professionals who can effectively address the demands of coordinated innovation. The propensity and vigor of firms of different sizes to participate in joint research and development activities vary.

Argument

Research has shown that firms characterized by bigger size and more economic and technical prowess exhibit a higher level of enthusiasm for collaborative innovation. However, the level of readiness to cooperate among small and medium-sized firms is sometimes uncertain until they make the decision to engage in collaboration with other businesses, research institutions, or universities. Based on empirical evidence derived from surveys and research, it has been shown that some organizations that have a propensity for participating in collaborative innovation tend to exhibit the following discernible characteristics: The firm operates within an industry characterized by a significant presence of science and technology, and is subject to intense rivalry from industry peers. As a consequence of the prevailing environmental conditions, firms exhibit a greater inclination towards engaging in joint research and development endeavors with other entities. Another aspect is that in the event of internal organizational issues, there is a need and willingness to seek assistance from external research and development (R&D) teams. There are



many rationales for organizations to participate in collaborative innovation. One such rationale is the ability to integrate external superior resources, which may enhance the overall innovation process. Additionally, collaborative innovation allows for the sharing of advantages among participating entities, fostering a sense of mutual gain. Moreover, the synergistic output resulting from collaboration can lead to amplified gains that would not be achievable via individual efforts alone. The use of more advanced capabilities and technological items inside a business may eventually lead to increased profitability and reduced manufacturing costs. Within the context of collaboration between universities and enterprises, industrial organizations play a crucial role in implementing and promoting scientific and technological products. They assess the compatibility of research and development outcomes with market demands, facilitate the commercialization process, and conduct thorough evaluations to identify any shortcomings or inadequacies. The advent of new technical goods has facilitated the establishment of a real-time feedback loop, hence enhancing the viability of collaborative innovation research and the production of novel products inside academic institutions. 1. Enhancing the utility derived from the company's joint innovation efforts In the research and development (R&D) process, corporations are required to allocate resources not only for project funding, but also for capital investment, staff acquisition, technical equipment procurement, knowledge acquisition, and other related expenses. Additionally, it is expected to have a positive impact on investing strategies. The kinds and volumes of creative resources have a direct impact on the company's cost. The increase in expenses may also be attributed to the amount of interdependence among cooperative groups, the degree of uniformity across firms, and the intense competitiveness within the market. Hence, it is essential for firms to allocate a portion of their resources towards the establishment and sustenance of collaborative relationships (Jin, 2022). There exists a positive correlation between the degree of connection and the speed of establishing collaborative partnerships, as well as the efficacy of creative goods. This correlation further contributes to the sustained and steady growth of collaborative innovation inside institutions. at the context of collaborative innovation at universities, the primary revenue stream for corporations is derived from the commercialization of novel goods or patents. Additionally, the objective of profit maximization serves as a fundamental driver for corporate engagement in collaborative innovation endeavors. Due to the global impact of the COVID-19 pandemic, a significant number



of institutions worldwide have transitioned to the e-learning model. Consequently, this shift has introduced additional variables that influence academic engagement and subsequently impact student achievement. Psychological security is one of the contributing variables. Numerous scholarly investigations have been conducted to explore the significance of psychological safety levels among students. Within this body of research, several scholars have proposed a specific approach for evaluating this crucial indication. Nevertheless, there is a limited body of research that examines the correlation between students' degrees of psychological stability and their dedication and success in academic settings.

The female participants exhibited a greater degree of psychological safety while expressing their own thoughts, particularly within the context of the webinar sessions. Similar patterns were seen in both academic dedication and degrees of achievement. The results derived from the use of linear regression analysis indicated that there was no significant positive relationship between psychological security and academic achievement. In contrast to prior research, the concept of student security is now recognized not just as a matter of safeguarding personal data, but also as a psychological component. The impact of psychological safety on students' engagement and academic achievement has been shown to be particularly pronounced within the context of online education. The present study starts with an introduction. In light of the circumstances surrounding the COVID-19 outbreak in March 2020, the city of St. Petersburg, named after the renowned Russian monarch Peter the Great, The majority of institutions worldwide, including St. Petersburg Polytechnic University (SPbPU), have transitioned to the e-learning style. Immediate modifications were deemed necessary due to the prevailing distribution of university courses, whereby a mere 4% were conducted exclusively online, 14% were partly conducted online, and the other 82% were conducted in a traditional full-time manner (Authors and Khalyapina, 2019; Authors, 2020). The whole shift towards digital learning has presented several challenges across all domains of education (Authors & Khalyapina, 2019). Based on the research conducted by Buzzetto-More and Koochang (2009) as well as Jorge Miguel Moneo et al. (2015), several aspects are impacted by the situation at hand, including the mental well-being of both students and educators, the level of student involvement, and, of equal significance, academic achievement. Numerous scholars have conducted investigations on diverse indicators that possess the potential



to directly or indirectly influence students' attitudes towards the educational process, as well as their academic involvement and performance (Miguel Moneo et al., 2015). Ensuring the psychological well-being of students is a primary objective for universities throughout the shift to e-learning. provides a gift.

In order to effectively cultivate an educational environment, the following study topics are proposed:

- 1. Is there a big difference in the levels of psychological safety, academic commitment, and academic performance between men and women?*
- 2. How do students' varying degrees of psychological security relate to their behavioral, emotional, and cognitive commitments?*
- 3. How do students' different degrees of psychological security relate to their academic performance?*
- 4. To what extent does the level of psychological safety not tire students' academic performance and participation? Therefore, this study pursues the following as key objectives:*
- 5. To determine the relationships between psychological safety, academic commitment, academic performance and gender in a sample of university students;*
- 6. Establishing the relationships between psychological safety level, academic commitment and performance.*

Theoretical Background

The concept of e-learning refers to the use of electronic technologies to facilitate and support learning and E-learning, acknowledged as a novel pedagogical approach, involves many methods of learning and teaching that are supported by technology (Tavangarian et al., 2004). It incorporates a range of definitions that pertain to enhanced access to educational materials, more flexibility for learners, and the extension of their capabilities (Lowenthal et al., 2004). (2009). Additionally, this method is often regarded as the most expedient and economically efficient



approach, making it accessible to individuals of all socioeconomic backgrounds to engage in the educational endeavor. In a study conducted by Nazarova (2018), the concept of dynamic e-

Conclusion

The argument posits that education should contain cutting-edge information that is readily available to all pupils. The use of e-learning technology provides educational institutions with many benefits, such as a concise and effective learning process, adaptability, and modularity. One of the identified limitations of e-learning is the prevalence of high dropout rates, which may be attributed to several factors such as lack of engagement and motivation (Iacob, 2011). Additionally, e-learning implementation entails substantial expenses in terms of design and maintenance, which can pose challenges for educational institutions and organizations (Iacob, 2011). Numerous investigations have been undertaken to examine the perspective of students and users towards e-learning. A research was undertaken by Buzzetto-More and Koohang (2009) to investigate the attitudes of students about several aspects of e-learning. The researchers have made the observation that the use of e-learning methodologies has the potential to enhance students' comprehension of the subject matter they are studying, so exerting a significant influence on the realm of higher education. According to Selim (2007), the primary determinant of e-learning success, as perceived by students, is the features of the instructor. In a study conducted by Mohd Alwi (2009), the perceptions of e-learning specialists were examined, revealing a consensus among participants on the presence of security hazards in e-learning. Furthermore, the participants emphasized the significance of conducting a thorough security audit in e-learning to provide a secure learning environment. An additional crucial consideration is to the university's preparedness for the implementation of an e-learning system. It is crucial to acknowledge that universities are obligated to fulfill contemporary standards for implementing e-learning, which encompass the provision of reliable software, technical resources, and an innovative curriculum that considers the unique characteristics of the educational setting (Authors and Khalyapina, 2019; Lowenthal et al., 2009; Volodarskaya et al., 2019).



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