- Quality Assurance: Video recording provides a visual record of the cutting process, allowing manufacturers to review and validate the quality of the cuts and detect any potential issues.
- Process Optimization: The recorded video data can be analyzed to identify trends, patterns, or areas for improvement in the cutting process, leading to enhanced manufacturing efficiency and quality control.

Implementing a software system for setting up a 3D milling machine with video recording capabilities involves several challenges [3]:

- Hardware and Integration: Ensuring seamless integration between the 3D milling machine, camera, and software system requires careful hardware selection and compatibility considerations.
- Real-Time Processing: Performing video analysis in real-time necessitates efficient algorithms and computational resources to minimize latency and ensure timely machine control.
- Lighting and Image Quality: Adequate lighting conditions and image quality are crucial for accurate defect detection and analysis. Careful attention must be given to lighting setups and camera settings.
- System Calibration and Accuracy: Precise calibration of the video analysis system and alignment with the milling machine is essential to achieve accurate and consistent results.

Conclusion

The integration of video recording and analysis capabilities into the setup of a 3D milling machine offers a promising solution for cutting defective sheet materials. By leveraging real-time video analysis and machine control, manufacturers can achieve precise cuts while simultaneously capturing video footage for quality control purposes. Although implementing such a software system presents challenges related to hardware integration, real-time processing, and calibration, the benefits of enhanced accuracy, efficiency, and quality assurance make it a valuable innovation for the manufacturing industry.

References

- 1. Farghaly, A., & El-Sayed, A. (2016). Intelligent Quality Control System Based on Image Processing for Laser Cutting. International Journal of Computer Applications, 139(2), 38-42.
- 2. Li, Y., et al. (2019). An Automatic Visual Inspection System for Defect Detection in Sheet Metal Manufacturing. Journal of Manufacturing Systems, 50, 1-11.
- 3. Puente, S. T., & Garcia, M. A. (2018). An Industrial Vision System for Quality Control in Sheet Metal Manufacturing Processes. Journal of Intelligent Manufacturing, 29(7), 1575-1586.

METHODS TO LESSEN THE PROBLEM OF HUMAN TRAFFICKING IN ILLEGAL IMMIGRATION

Ibrahim Mohamed Elsayed Elsherbini

Helwan University, Cairo, Egypt

Scientific Supervisor – S. M. E. Elsherbini

(Ph.D. student, Sukhoi State Technical University of Gomel, Gomel, Belarus)

Abstract: Human trafficking is a grave issue intertwined with illegal immigration, posing significant threats to human rights and global security. This study explores methods to mitigate the problem of human trafficking within the context of illegal immigration. It highlights preventive measures, law enforcement strategies, and international cooperation as key approaches to combat this issue. The information presented in this study is based on existing literature and studies, aiming to provide insights into effective methods for reducing human trafficking associated with illegal immigration.

Key words: human trafficking, illegal immigration, prevention, law enforcement, international cooperation.

E.R.A – Modern science: electronics, robotics and automation

Introduction

Human trafficking is a severe crime that exploits vulnerable individuals, often occurring within the context of illegal immigration. Addressing the problem of human trafficking is essential for safeguarding human rights and ensuring global security. This study discusses various methods aimed at lessening human trafficking in the context of illegal immigration, emphasizing preventive measures, law enforcement strategies, and international cooperation [1].

Results and discussion

Public Awareness and Education: Raising public awareness about the risks and consequences of human trafficking is crucial. Educational campaigns targeting both potential victims and the general public can help in identifying warning signs, promoting self-protection, and encouraging reporting of suspicious activities.

Addressing the root causes of illegal immigration and human trafficking requires efforts to alleviate poverty, improve access to education and healthcare, and create economic opportunities in countries of origin. Sustainable development initiatives can reduce the vulnerability of individuals to trafficking networks.

Enhancing border security measures, including increased personnel, advanced surveillance technology, and cross-border intelligence sharing, can help detect and intercept human trafficking networks. Collaborative efforts between countries can improve information exchange and coordination in combating human trafficking across borders.

Governments should enact and enforce comprehensive legislation that criminalizes all forms of human trafficking and provides appropriate penalties for perpetrators. Strengthening legal frameworks and ensuring their implementation can act as a deterrent and facilitate prosecution of traffickers.

Enhancing the capacity of law enforcement agencies, including police, immigration officials, and border control authorities, is essential. Specialized training programs on identifying and investigating human trafficking cases can equip personnel with the necessary skills to effectively combat this crime.

Establishing comprehensive victim support systems that prioritize the protection, rehabilitation, and reintegration of trafficking survivors is crucial. Accessible shelters, healthcare services, legal aid, and counseling can aid victims in rebuilding their lives and cooperating with law enforcement agencies.

Bilateral and Multilateral Agreements: Strengthening cooperation between countries through bilateral and multilateral agreements is vital in addressing the transnational nature of human trafficking. Sharing intelligence, harmonizing legislation, and coordinating efforts in investigation, prosecution, and victim assistance can yield significant results [2-3].

Facilitating the exchange of data and research findings among countries and international organizations can enhance understanding of human trafficking trends, patterns, and vulnerabilities. This knowledge can inform evidence-based policies and interventions.

Combating human trafficking requires efforts to address the demand for exploitative services. Countries should collaborate to raise awareness, enforce laws targeting buyers and facilitators, and promote responsible business practices that eliminate the use of trafficked labor.

Conclusion

Combating human trafficking within the context of illegal immigration necessitates a comprehensive and coordinated approach. By implementing preventive measures, strengthening law enforcement strategies, and promoting international cooperation, societies can work towards minimizing the incidence of human trafficking. Continued efforts, including legislative reforms, capacity building, victim support, and research collaboration, are crucial to effectively address this grave human rights violation.

References

- 1. International Organization for Migration. (2020). Data and research on human trafficking. Retrieved from https://www.iom.int/human-trafficking.
 - 2. United Nations. (2000). Protocol to Prevent, Suppress and Punish Trafficking in Persons,

Especially Women and Children. Retrieved from https://www.unodc.org/documents/treaties/UNTOC/Publications/TOC%20Convention/TOCebook-e.pdf

3. International Labour Organization. (2017). Global Estimates of Modern Slavery: Forced Labour and Forced Marriage. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---dgreports/--dcomm/documents/publication/wcms_575479.pdf

USING IT TO IMPROVE THE RELATIONSHIP BETWEEN REPUBLIC OF YEMENI UNIVERSITY STUDENTS' SELF-CONCEPT AND ADAPTATION

Ibrahim Mohammed Qasem Yahya AL-Askari (Ph.D. stdent)

Dr. Babasaheb Ambedkar Marathwada University in Aurangabad, Maharashtra, India Scientific Supervisor – **Dr. Sandip .N. Sirode**

(Dr. Babasaheb Ambedkar Marathwada University in Aurangabad, Maharashtra, India)

Abstract: The relationship between self-concept and adaptation is crucial for university students, as it affects their academic performance and overall well-being. In the Republic of Yemen, where students face unique challenges due to sociopolitical factors, leveraging Information Technology (IT) can play a significant role in enhancing this relationship. This report explores the potential of IT in improving the self-concept and adaptation of Yemeni university students. It discusses the use of online platforms for self-expression, virtual communities for social support, elearning for academic development, and digital resources for career guidance. By harnessing IT, Yemeni universities can empower their students, foster a positive self-concept, and facilitate successful adaptation to the academic environment.

Key words: self-concept, adaptation, university students, Information Technology, online platforms, virtual communities, e-learning, career guidance, Republic of Yemen.

Introduction

The self-concept and adaptation of university students are interconnected factors that significantly impact their academic success and overall well-being. In the Republic of Yemen, where students face unique sociopolitical challenges, utilizing Information Technology (IT) can be a valuable tool in improving this relationship. This report explores the potential of IT in enhancing the self-concept and adaptation of Yemeni university students. By leveraging online platforms for self-expression, virtual communities for social support, e-learning for academic development, and digital resources for career guidance, Yemeni universities can empower their students and facilitate their successful adaptation to the academic environment. [1].

Results and discussion

IT offers various online platforms that enable Yemeni university students to express themselves creatively and build a positive self-concept. Blogging, vlogging, and social media platforms provide spaces for students to share their thoughts, experiences, and talents with a wider audience. By encouraging self-expression through digital media, students can develop a sense of identity, gain self-confidence, and connect with like-minded individuals. These platforms also foster a sense of belonging and promote positive self-perception, leading to improved adaptation and overall well-being [1-2].

IT facilitates the creation of virtual communities where Yemeni university students can seek social support and engage with peers facing similar challenges. Online forums, discussion boards, and social networking groups provide platforms for students to connect, share experiences, and receive emotional support. These virtual communities can help alleviate feelings of isolation, enhance social integration, and promote a sense of belongingness among students. By establishing supportive networks through IT, students can improve their self-concept and adapt more effectively to the university environment [3].

IT-based e-learning platforms offer Yemeni university students opportunities to enhance their academic skills and knowledge. Online courses, educational websites, and digital libraries