

## Chapter 3

### Subjective outcome evaluation of an online program on law-abiding leadership

Xiaoqin Zhu, PhD<sup>1</sup>, Daniel TL Shek, PhD, FHKPS, BBS, SBS, JP<sup>1</sup>, Xue Wu, PhD<sup>2</sup> and Hongyi Zhan, MA<sup>2</sup>

<sup>1</sup> *Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hong Kong, PR China* and <sup>2</sup> *Office of Undergraduate Studies, The Hong Kong Polytechnic University, Hong Kong, PR China*

To promote national security education amongst college students, we developed a law-abiding leadership subject consisting of a 3-hour online lecture plus 7-hour self-study materials. In this chapter, we reported the findings of a post-program subjective outcome evaluation using a 19-item scale ( $N=557$ ) to understand undergraduate students' (Senior-Year intake) of the subject. Results demonstrated that the scale possessed high internal consistency, validity, and reliability levels. Overall, students viewed the curriculum design favorably and agreed that the program significantly improved their understanding of the law-abiding education learning outcomes. In addition, they pledged to be law-abiding citizens and socially responsible leaders after completing the course. More importantly, this study supported the claim that e-learning with self-paced study mode is an efficient and flexible platform to explore politically sensitive issues related to National Security Law education. It offers students a less hostile environment for acquiring law-related skills and knowledge compared to the traditional classroom delivery, which may produce tense interaction. In summary, this study replicated previous research in a new sample of students, demonstrating the online program's perceived effectiveness on law-abiding leadership.

**Correspondence:** Daniel TL Shek, PhD, FHKPS, BBS, SBS, JP, Associate Vice President (Undergraduate Program), Chair Professor of Applied Social Sciences and Li and Fung Professor in Service Leadership Education, Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hungghom, Hong Kong, PR China. Email: daniel.shek@polyu.edu.hk.

### Introduction

A successful leader should have domain-specific skills (i.e., expertise) and excellent soft skills (1). Furthermore, a leader should also exercise law-abiding leadership in abiding by the norms and regulations of the community and society, violating which could have devastating consequences for individuals and society (2,3). However, deviant behavior such as cheating or plagiarism is not uncommon among youths and is now a growing problem globally (4,5). Thus, to prevent these misbehaviors, which may develop into more severe wrongdoings or even crimes, socially accepted values and legal responsibilities should be presented to university students as far as practicable clearly and concisely. Law-related education (LRE) has been regarded as a highly effective way to build one's legal awareness. The Special Committee on Youth Education for Citizenship (6) concluded that "LRE can be understood as an education to cultivate the knowledge, skills, and values needed by citizens to function effectively in a pluralistic and

democratic society based on the rule of law” (6). It is believed that LRE can prevent newer generations from engaging in illegal behavior (7).

However, previous research showed that the younger generation in Hong Kong lacks an in-depth comprehension of law abidance and tends to disobey laws that they deem “unreasonable” (8,9). Two significant “social events” erupted in Hong Kong in the past decade due to a lack of law-abiding knowledge. For example, after the Standing Committee of the National People’s Congress (NPCSC) released “*The decision on improving the electoral system of the Hong Kong Special Administrative Region*”, a series of sit-in street demonstrations known as the “Occupy Central Movement” (or “Umbrella Movement”) broke out in Hong Kong from late September to mid-December of 2014. Protests by students and members of the public outside government offices and the occupation by some of the numerous key subway junctions and highways harmed the daily lives of those living in Hong Kong. Another “social event”, generally known as “the Anti-Extradition Law Amendment Bill Movement”, was held in Hong Kong with a series of demonstrations from March 15, 2019 in reaction to the presentation of “the Fugitive Offenders Amendment Bill on Extradition”. The initially peaceful demonstrations developed into violence, vandalism, and sieges (10). For instance, the protesters beat people with different political opinions, constantly damaged railway facilities, and occupied two universities in Hong Kong, which caused detrimental effects on people’s studies, work, and life.

In response to such social instability as well as the failure to legislate on “Article 23 of the Basic Law”, “The Law of the People’s Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region”, also abbreviated as “Hong Kong National Security Law” (or “NSL”), was enacted on June 30<sup>th</sup>, 2020 to “establish and improve the legal system and implementation mechanism for safeguarding national security in the Special Administrative Region” (11).

The NSL is highly related to people’s well-being. First, The law significantly influences the living environment and, in turn, health (12). When everyone living in society abides by laws, study, work, and life can be carried out safely and orderly, without feeling fearful of any potential social unrest, such as terrorist activities. Second, concerning Maslow’s hierarchy of human needs, safety needs (e.g., security of body, health, property) are placed at a rather fundamental level, with the satisfaction of which could allow people to pursue higher-order psychological and self-fulfillment needs. This suggests that when people know they are physically safe, they can fulfill the needs of love, esteem, and self-actualization, all of which enhance their quality of life. Because of the importance of social stability and national security to individuals’ quality of life, laws about national security are commonly practiced internationally and are gaining mounting attention.

Nevertheless, some people hold skeptical views toward NSL. For example, some skeptics believed that the law would constrain the freedom of speech, undermine Hong Kong’s press freedom, and lead to self-censorship when criticizing the government. Chris Yeung, the former Chairman of the Hong Kong Journalists Association, has voiced his concerns that “the arrests of *Apple Daily* staff members have exacerbated the fear among journalists since the enactment of the national security law” (13). He also believed that “the law has had a more damaging impact on freedoms and way of life than many people had anticipated” (13). In addition, others argued that the coercive Chinese Communist Party imposed the HKNSL without the support of the Chinese people. For instance, in our previous studies on NSL education (3), some students commented that “it is sadly a ‘Party’ Security Law” (3). As such, objective NSL education is deemed quite necessary to promote a proper understanding of HKNSL among the public,

especially young people. Indeed, Article 10 of the NSL states that “the Hong Kong Special Administrative Region shall promote national security education in schools and universities and through social organizations, the media, the internet, and other means to raise the awareness of Hong Kong residents of national security and of the obligation to abide by the law” (14). It underlines the significance of higher education institutions in the process of legal socialization, which means that the younger generation “grow their relationship with the law by learning law-related values, attitudes and reasoning skills” (15). Niu (16) also advocated that higher education institutions have a responsibility to promote law-abiding values and behavior among students and nurture qualified leaders.

Accordingly, to promote law-abiding education among undergraduate students, we integrated a national education curriculum focusing on law-abiding leadership and NSL education into a leadership training program in a leadership subject. In particular, a 3-hour face-to-face course and 7-hour self-study including basic concepts (i.e., “law and law-abiding behavior”, “law-abiding leadership”, and “national security”), historical background (modern Chinese history including “the history of Hong Kong”, “the Constitution” and “the Basic Law”), and Hong Kong NSL (“four major offences”, and “the issues and myths surrounding NSL”) have been developed. Since the 2021/2022 academic year, all Year-1 students in a 4-year or 5-year undergraduate programs are required to complete the national education to cultivate their understanding of NSL and foster their law-abiding leadership values and practices. As a graduation requirement, students must pass a multiple-choice-question test (i.e., correctly answering at least 16 out of 20 questions) as the national education assessment. Studies showed that this assessment mode can consolidate student learning (17,18).

For those students who do not have to take the required leadership subject (i.e., Senior-Year intake and articulation degree program students), an e-learning module mirroring the 3-hour face-to-face lecture plus the same self-study materials are provided since the 2022/2023 academic year. They also need to pass a similar assessment test as a graduation requirement.

The opportunities and challenges associated with online learning have been widely discussed in the literature. The advantages, such as its easy accessibility, flexibility, and affordability, have been highlighted by many practitioners and researchers (19-21). In addition, by eliminating the social limitations of face-to-face interactions, online learning may also safeguard students’ anonymity, allowing them to be fully involved in the course without the fear of repercussions from their participation (3,22). Also, the online environment gives students the space and time to address sensitive issues by removing the need for immediate response (23). Davis (24) concluded the benefits of “public anonymity” in higher education institutions as “the ability of the student to submit responses viewed by the entire class without his or her identity being revealed” (p. 301). Besides anonymity, Gupta et al (25) also identified several attributes underlying online learning, including richness, simultaneity, telepresence, and synchronicity. Therefore, online learning is seen as an effective solution to teaching sensitive topics.

On the other hand, there have been voices showing dissatisfaction with technological, pedagogical, and social issues related to the online approach, such as a lack of motivation, engagement, interaction, self-regulation, and learning disposition (19,26-28), all of which may co-work to shape students’ satisfaction and achievements (29). In particular, some scholars have questioned students’ lack of active engagement in online courses, as active involvement is a prerequisite for meaningful learning. Educators claim that active learning doesn’t happen naturally in the classroom; it is much more likely to occur when the instructor creates an ideal and safe introductory learning environment (22).

Previous feedback from students who completed the 3-hour face-to-face law-aidance leadership lecture in the 2021/2022 academic year was generally positive, suggesting that students may benefit from a law-abiding education in terms of their comprehension, attitudes, and behavioral intention to the NSL (3,30,31). Besides, teachers also shared that the students had a very positive perception of the program.

Since the law-abiding leadership and NSL program was delivered to Senior-Year students through an e-learning module, which may be different from learning in the face-to-face lecture as illustrated before, students' learning experiences and perceptions of the e-learning module need further investigation. In particular, as the topic is politically sensitive, the perceptions and responses of the students to the online national security education are also significant aspects of their learning motivation and involvement in the self-paced online program, which would subsequently contribute to their quality of life on and off the campus to some extent. Thus, we attempted to understand students' views on online national education and the benefits they perceived on personal development.

In this chapter, we focus on Senior-Year students' evaluations of the e-learning module, including the 3-hour online course and 7-hour self-study in Semester 1 of the 2022/2023 academic year via post-course evaluation, which has been widely used to secure students' views toward educational programs (3,31,32). The post-course evaluation form in this study was adapted from the 26-item measure that was used by Shek et al. (3) in investigating students' views toward different aspects of the face-to-face national education program in 2021/2022 year. The adapted evaluation form retained two original dimensions, including the perception of program attributes (e.g., content, benefits of e-learning program to personal development, seven items) and views of law-abidance leadership (8 items). A new dimension related to the evaluation of self-paced online learning mode (3 items) was added while items in the dimension of teacher attributes were deleted because students took the course via the internet, and there was no interaction between teacher and students or amongst students. The item on the overall evaluation was also retained, resulting in a 19-item scale (see Table 1). Using the insights of Senior-Year students, we sought to answer the following two questions in this study:

1. What psychometric properties does the modified evaluation form possess? We expected the aforementioned three-dimensional structure to be supported (Hypothesis 1).
2. What are students' perceptions of the online national education program, including the program attributes (course design, content, and benefits), views of law-abiding leadership, and perception of self-paced learning mode? Based on previous studies (3,31), we expected that most students would respond positively to different aspects of the program (Hypothesis 2).

Table 1

## **Our study**

After the Senior-Year students complete the e-learning module and pass the assessment test, they are directed to the post-lecture evaluation form to which they can respond anonymously and voluntarily. Institutional ethics approval was obtained before launching the study. By the end of the first semester of the 2022/2023 academic year (i.e., 8<sup>th</sup> January 2023), 557 students ( $M_{\text{age}} = 20.91$ ,  $SD_{\text{age}} = 1.90$ ; 52.42% males) out of 1,145 students (response rate = 48.6%) passing the test completed the survey.

## **Instruments**

As aforementioned, the evaluation form adopted in the present study included 19 items concentrating on different aspects of the e-learning program (see table 1). Each item was rated using a 6-point scale (“1=strongly disagree; 6 = strongly agree”).

## **Data analysis plan**

Data were analyzed using SPSS 28.0 and Mplus 8.5. Confirmatory factor analysis (CFA) was conducted via Mplus to determine whether the proposed 3-factor structure matched the data well. Model fitness indices and the respective criterion, including “comparative fit index” ( $CFI \geq 0.90$ ), “Tucker-Lewis index” ( $TLI \geq 0.90$ ), “root mean square error of approximation” ( $RMSEA \leq 0.08$ ), and “standardized root mean squared residual” ( $SRMR \leq 0.08$ ) were adopted to indicate adequate model fitness (33). Descriptive analyses were performed using SPSS 28.0 to illustrate the characteristics of students’ responses regarding different aspects of the e-learning module on national education.

## **Findings**

Results of CFA supported the proposed three-dimensional structure with  $\chi^2_{(131)} = 411.79$ ,  $CFI = 0.95$ ,  $TLI = 0.94$ ,  $RMSEA = 0.06$ ,  $SRMR = 0.04$ . Among all items, factor loadings ranged between 0.74 and 0.94. The average factor loadings for the three dimensions were 0.91, 0.88, and 0.91, respectively (see Table 2). As shown in Table 2, reliability measures, including Cronbach’s  $\alpha$  and McDonald’s  $\omega$  for the three dimensions were above 0.93, indicating good internal consistency. In addition, the three dimensions were significantly correlated ( $r_s = 0.64\text{--}0.84$ ,  $p_s < 0.001$ ). The three dimensions were also significantly correlated with the overall evaluation, with the coefficient ranging between 0.68 and 0.87 ( $p_s < 0.001$ ). Hence, Hypothesis 1 was well supported.

Table 2

## **Students’ responses on different aspects**

Table 1 illustrates students’ perceptions of the course from different perspectives. As anticipated, students generally had positive views of the course. First, they expressed satisfaction with the design of the learning mode. Most students (86.03% and 87.57%) agreed that the self-directed and online learning modes were efficient and flexible, respectively.

Second, the results indicated that most students held positive views of law abidance after completing the course. Specifically, 85.92% and 83.94% of the students perceived that the course helped them better understand law abidance as an essential indicator of societal stability and the “concepts of national security”, respectively. In addition, 87.16% agreed that the course provided clear explanations of “the offenses and penalties surrounding the Hong Kong National Security Law”, and 82.19% felt that “some myths related to the law” were dispelled during the course. Notably, 90.63% and 87.86% of the students expressed a willingness to “serve as a law-

abiding citizen” with “socially responsible behavior”, respectively, which is consistent with the course objectives.

Finally, the present study demonstrated that students had a generally favorable opinion of the course attributes, although the percentages of positive responses in these items were comparatively lower than those in relation to law-abiding leadership as well as the appreciation of learning mode. Specifically, around 67.70% of the students found the curriculum design satisfactory, and more than 70% assumed that “the course offered ample opportunities for reflection”. Moreover, a majority of students believed that the course was beneficial for their “personal development” (71.27%), “problem-solving ability” (65.64%), as well as “the importance of attributes to be successful leaders, such as critical thinking and moral competence” (70.58%). In sum, the quantitative results based on students’ responses to various aspects of the course attributes were generally positive and met our expectations. Therefore, Hypothesis 2 was supported.

## **Discussion**

The current study explored the post-lecture evaluation of an e-learning national education program offered by a public university in Hong Kong. To summarize, three objectives of this study were achieved. First, the study replicated the findings in the previous studies (3,31) with a new sample of Senior-Year intake students attending a similar course via self-paced and online learning mode at different times. Second, this study investigated Senior-Year students’ views of national security education and its potential benefits, complementing previous research on Year 1 undergraduate students. Third, compared with the previous study on HyFlex learning mode (31), this study specifically examined the potential impact of e-learning mode on both teaching and learning, as well as whether such mode was positively received without interaction or communication between students and instructors and students to each other. These findings contribute new knowledge to teach sensitive topics in an online environment.

The findings suggested that students generally had positive views towards the course attributes, law-abiding leadership, and learning mode. Based on the quantitative findings, several observations can be drawn. First of all, the results indicated that the course attributes were viewed positively by students, and they perceived the course as positively impacting their interpersonal and intrapersonal development. Specifically, students found the design and content of the course appealing and believed that it provided opportunities for reflection and critical thinking, which are important for shaping them into successful leaders. Chinese cultural values, influenced by Confucianism, emphasized traditional virtues such as “benevolence” (“ren”), “righteousness” (“yi”), “propriety” (“li”), “wisdom” (“zhi”), and “trustworthiness” (“xin”), which are considered essential for successful leaders (34). Consistently, the study’s findings also suggested that being a successful leader involves law-abiding behaviors and positive personal development. These findings are generally consistent with previous research conducted by Shek and colleagues (3,31) with similar evaluation methods. Collectively, these studies provide strong evidence of the course’s positive impact on the future development of undergraduate students. As Karns (35) has noted, an activity containing values for the students would “give them opportunities to express themselves, to make decisions, to enjoy the camaraderie of their peers, and to improve their employability” (35).

However, it is worth noting that the proportions of positive responses from Senior-Year students were comparatively lower than those from previous studies among their Year 1 counterparts (3). Moreover, after attending this course, many Senior-Year students held negative

perceptions of their improvement in interpersonal communication skills. These discrepancies might be attributed to the different learning modes. Unlike Year 1 students who took a similar course using face-to-face teaching with instructors' guidance of learning, the course for Senior-Year students was delivered via a self-paced e-learning module. Thus, the course might lead to the need for peer interaction and affiliation in the process of promoting self-autonomy in the learning process and protecting students' anonymity. Nevertheless, more evidence is needed to test this hypothesis. As a result, future studies should explore other factors contributing to differences in students' perceptions of the course attributes between Senior- and First-Year students.

On the other hand, although the e-learning and self-paced study mode may limit interaction and communication between instructors and students, it was perceived as efficient and flexible in this national security education subject area according to the post-course evaluation. This e-learning module promoted students' learning experience by offering a less hostile environment for acquiring law-related knowledge and skills, and enabled students to be more comfortable with the course content. This result is consistent with prior research efforts on national security education (3) and suggests that self-paced online learning is an effective way to enhance the satisfaction of online learners by contributing to aspects concerning the perceived impartiality of learning and assessment and the effect of personal cognition, including locus of control and self-efficacy.

Meanwhile, given that national security education involves politically sensitive topics, some students in Hong Kong may have opposing or controversial views expressing resistance towards law-abiding education regarding national security and NSL (36). For example, Russell and colleagues proposed (37) that "some students feel personally accused when they hear about a group to which they belong perpetrating injustice against a power minority... students could also feel constrained in their critique of the content being presented for fear of offending the professor (who has more power than they do in the classroom), adding to their experience of feeling threatened" (37). These problems will particularly appear in national security education class where students may hold oppositely presupposed acknowledge and feel worried about sharing their true feelings. Therefore, it is an excellent choice to create a safe and comfortable environment for students to explore knowledge during the course is to use e-learning mode. As Asbury and Orsborn (38) argued in their study of cultural safety e-learning, "a private and independent e-learning package can provide students with a safe environment to encounter challenging concepts and improve their understanding of sensitive topics" (38). As a result, they believed that although "the online environment will not suit all learners, for many others, a platform where content can be explored privately and independently may be the optimal environment to encounter potentially challenging content" (38). This may explain why most students responded positively to the e-learning and self-paced mode in the post-course evaluation. Flexible e-learning modules are beneficial for students who have already been familiar with these sensitive topics as well as those encountering the concepts for the first time. Students significantly improved their knowledge and understanding of National Security Law while being comfortable with the course content and delivery mode. To sum up, our finding is a valuable supplement to current research and highlights the benefits of using e-learning for teaching national security education.

Third, in terms of law-abiding leadership, the lecture was perceived as an effective way to enhance students' understanding of the importance of law abidance, law-abiding leadership, national security, National Security Law, and related issues. Besides, students agreed that the

course would better prepare them to be ethical and effective social leaders. These results were consistent with the previous findings published by Shek and colleagues (3,31), who emphasized the significance of cultivating law-abiding leadership among university students. According to Shek et al (3), adhering to legal requirements enhances “respect for the law, promotes justice, and enables leaders to serve as role models for their subordinates when they observe the requirement of the law” (3). Therefore, these findings indicated that the course benefits university students in promoting law-abiding leadership.

Finally, the study supports the psychometric properties of the assessment tool. In particular, the study provides factorial validity for the measure. Although the current instrument was only validated in law-related or general education courses, it is argued that subjective outcome evaluation can be applied to other courses with sensitivity or controversial contents because this method effectively allows students to share their experiences. Meanwhile, researchers may efficiently and conveniently use this method in their routine practice.

Even with the benefits of self-paced and e-learning mode and its application to law-abiding leadership and NSL education being demonstrated in this study, there are some limitations that should be borne in mind in interpreting the present findings. First, as this study relied on a quantitative method, it would be beneficial to incorporate a qualitative or mixed-method approach, including data collection from a qualitative evaluation, focus groups, and individual interviews. However, another chapter based on qualitative findings has shown complementary support for this e-learning program. Second, this study only covered one university in Hong Kong. Since all universities in Hong Kong are responsible for providing national security education to enrich public knowledge of NSL and enhance their awareness of law abidance under the requirements of HKNSL, the circumstances in other tertiary education institutes in Hong Kong should be considered for future discussion. Third, the current response rate (i.e., 48.6%) is not as high as that in our previous studies based on face-to-face and hybrid modes on the “Tomorrow’s Leaders” subject (face-to-face: 69.7%; hybrid: 78%) (3,31). It is noted that the response rate of online surveys (on average 33%) is generally much lower than that of paper-and-pencil-based surveys (on average 56%)(39). In addition, the current response rate is higher than the recommended threshold response rate (i.e., 35%) when the sample size is larger than 50 (39). Thus, the current sample size and response rate are sufficient to yield valid findings. Finally, as this study was conducted at the end of the first semester of the 2022/23 academic year and involved a new group of Senior-Year students for an initial attempt, there is a need to replicate this study to investigate the effect of law-abiding leadership education further.

Overall, the study’s findings supported the thesis that the e-learning course of law-abiding leadership could enrich university students’ legal awareness to be socially responsible citizens and leaders. Although this study has several limitations, it provides insight direction for future improvement of the subject course and self-paced and online learning mode.

## **Acknowledgments**

The development and implementation of the National Security Programs as well as this evaluation study were supported by The Hong Kong Polytechnic University. The preparation of this paper is financially supported by Wofoo Foundation (ZH2C and ZH4Q) and Research Matching Fund of the Research Grants Council (ZECL). This is a reprint of an article published in the *International Journal of Child Health and Human Development*.

## **References**

1. Shek DTL, Chung P, Lin L, Leung H, Ng E. Service leadership under the service economy. In: Chin JL, Trimble JEG, Joseph E., eds. *Global and culturally diverse leaders and leadership: New dimensions and challenges for business, education and society*. Bingley: Emerald, 2017:143-61.
2. Shek DTL, Chung P, Zhu X. Service leadership in the service Era. In: Poff DC, Michalos AC, eds. *Encyclopedia of business and professional ethics*. Cham: Springer, 2018:1-7.
3. Shek DTL, Dou D, Zhu X, Li X. Law abidance leadership education for university students in Hong Kong: Post-lecture evaluation. *Front Psychol* 2022;13:994448.
4. Anitha P, Sundaram S. Prevalence, types and reasons for academic dishonesty among college students. *J Stud Soc Sci Humanit* 2021;7(1):1-14.
5. Chen Y, Chou C. Are we on the same page? College students' and faculty's perception of student plagiarism in Taiwan. *Ethics Behav* 2017;27(1):53-73.
6. Special Committee on Youth Education for Citizenship. *Essentials of law-related education*. Chicago, IL: American Bar Association, 2003.
7. Baeihaqi B, Komalasari K. Law-related education framework in civic education learning in the new normal perspective. *Adv Soc Sci Educ Humanit Res* 2021;636:542-7.
8. Kennedy KJ, Chow J. Adolescents' attitudes to law and law-related issues: The case of Hong Kong students. *Citizsh Soc Econ Educ* 2009;8(2-3):84-98.
9. The Hong Kong Federation of Youth Groups. *Strengthening the rule of law through education*. Tsat Tsz Mui: The Hong Kong Federation of Youth Groups, 2021.
10. Shek DTL. Protests in Hong Kong (2019-2020): A perspective based on quality of life and well-being. *Appl Res Qual Life* 2020;15(3):619-35.
11. HKSAR. *Decision of the National People's Congress on Establishing and Improving the Legal System and Enforcement Mechanisms for Safeguarding National Security in the Hong Kong Special Administrative Region*. Hong Kong: HKSAR, 2020.
12. Dingake OBK. The rule of law as a social determinant of health. *Health Hum Rights J* 2017;19(2):295-8.
13. Tsoi G, Wai LC. China's new law: Why is Hong Kong worried? *BBC News* 2020 May 29.
14. HKSAR. *The Law of the People's Republic of China on Safeguarding National Security in the Hong Kong Special Administrative Region*. Hong Kong: HKSAR, 2020.
15. Naftali O. "Law does not come down from heaven": Youth legal socialisation approaches in Chinese textbooks of the Xi Jinping era. *J Curr Chinese Aff* 2022;51(2):265-91.
16. Niu P. An artificial intelligence method for comprehensive evaluation of preschool education quality. *Front Psychol* 2022;13:955870.
17. Davies M, Pon D, Garavalia LS. Improving pharmacy calculations using an instructional design model. *Am J Pharm Educ* 2018;82(2):6200.
18. Sando KR, Feng X. Use of an online spaced-education game to study top 200 drugs in a skills laboratory course. *Am J Pharm Educ* 2018;82(7):6324.
19. Dhawan S. Online learning: A panacea in the time of COVID-19 crisis. *J Educ Technol Syst* 2020;49(1):5-22.
20. Palmer SR, Holt DM. Examining student satisfaction with wholly online learning. *J Comput Assist Learn* 2009;25(2):101-13.
21. Sharpe R, Benfield G. The student experience of e-learning in higher education: A review of the literature. *Brookes eJournal Learn Teach* 2005;1(3):1-9.
22. Barr ML. Encouraging college student active engagement in learning: Student response methods and anonymity. *J Comput Assist Learn* 2017;33(6):621-32.

23. Sobel DM, Sands DI, Dunlap JC. Teaching intricate content online: It can be done and done well. *Action Teach Educ* 2009;30(4):28-44.
24. Davis S. Observations in classrooms using a network of handheld devices. *J Comput Assist Learn* 2003;19(3):298-307.
25. Gupta S, Fadil P, Kale R. The influence of culture and demography of classroom participation: Integrating technology into the pedagogical paradigm. *Int Bus Res Teach Pract* 2009;3(1):71-89.
26. Chen K-C, Jang S-J. Motivation in online learning: Testing a model of self-determination theory. *Comput Hum Behav* 2010;26(4):741-52.
27. Chiu TKF, Hew TKF. Factors influencing peer learning and performance in MOOC asynchronous online discussion forum. *Australas J Educ Technol* 2018;34(4):16-28.
28. Ferri F, Grifoni P, Guzzo T. Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. *Societies* 2020;10(4):86.
29. Abuhassna H, Al-Rahmi WM, Yahya N, Zakaria MAZM, Kosnin ABM, Darwish M. Development of a new model on utilizing online learning platforms to improve students' academic achievements and satisfaction. *Int J Educ Technol High Educ* 2020;17(38):1-23.
30. Shek DTL, Zhu X, Dou D, Li X. National security law education in Hong Kong: Qualitative evaluation based on the perspective of the students. *Int J Environ Res Public Health* 2022;20(1):553.
31. Shek DTL, Zhu X, Li X, Dou D. Satisfaction with HyFlex teaching and law-abiding leadership education in Hong Kong university students under COVID-19. *Appl Res Qual Life* 2022;17(5):2833-58.
32. Zhu X, Shek DT. Subjective outcome evaluation of a positive youth development program in Mainland China. *Res Soc Work Pract* 2021;31(3):285-97.
33. Kline RB. Principles and practice of structural equation modeling, 4th ed. New York: Guilford, 2016.
34. Shek DTL, Sun RCF, Liu TT. Character strengths in Chinese philosophies: Relevance to service leadership. *Int J Disabil Hum Dev* 2015;14(4):309-18.
35. Karns GL. An update of marketing student perceptions of learning activities: Structure, preferences, and effectiveness. *J Mark Educ* 2005;27(2):163-71.
36. Yiu W. Universities in Hong Kong will require students to pass national education courses before graduating. *South China Morning Post* 2022 Dec 9.
37. Russell BS, Soysa CK, Wagoner MJ, Dawson L. Teaching prevention on sensitive topics: Key elements and pedagogical techniques. *J Prim Prev* 2008;29(5):413-33.
38. Asbury E, Orsborn G. Teaching sensitive topics in an online environment: An evaluation of cultural safety e-learning. *Whitireia Nurs Health J* 2020(27):23-31.
39. Nulty DD. The adequacy of response rates to online and paper surveys: What can be done? *Assess Eval High Educ* 2008;33(3):301-14.

**Table 1. Descriptive results of students' perceptions of the course**

Items	Mean	SD	Positive responses rate (%)
<b>Perception of program attributes</b>			
1. The design of this course was very good.	3.92	1.34	67.70
2. There were many opportunities for reflection in this course.	3.96	1.35	70.27
3. This course is helpful to my personal development.	3.94	1.38	71.27
4. This course has improved my problem-solving ability.	3.84	1.41	65.64
5. This course has improved my understanding of the importance of attributes of successful leaders (e.g., critical thinking, moral competence, law abidance etc.).	3.93	1.38	70.58
6. This course has improved my interpersonal communication skills.	3.63	1.47	57.48
7. This course has improved my critical thinking.	4.00	1.38	74.41
<b>Appreciation of law-abidance leadership</b>			
8. This course has helped me understand the importance of law abidance in leadership.	4.18	1.29	79.39
9. I understand that law abidance is important for the stability of a society.	4.38	1.24	85.92
10. This course has helped me understand the concepts of national security.	4.34	1.28	83.94
11. This course has helped me understand the offenses and penalties surrounding the Hong Kong National Security Law.	4.43	1.22	87.16
12. This course has helped me understand the importance of implementing the Hong Kong National Security Law.	4.26	1.32	80.84
13. This course has helped me clarify some myths related to Hong Kong National Security Law.	4.26	1.31	82.19
14. I will try my best to serve as a law-abiding citizen.	4.74	1.20	90.63
15. I will try my best to serve as a socially responsible leader.	4.53	1.20	87.86
<b>Evaluation of self-paced online learning mode</b>			
16. The self-paced online learning course enabled me to learn more efficiently about this course.	4.47	1.23	86.03
17. The self-paced online learning course allows me to learn the course materials according to my own situation.	4.55	1.20	87.57
18. Overall speaking, I like the self-paced online learning experience.	4.50	1.21	85.77
<b>Overall evaluation</b>			
19. Overall speaking, I have a very positive evaluation of this course.	4.13	1.39	76.80

Note. All items were rated on a 6-point Likert scale with 1 = Strongly Disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Slightly Agree, 5 = Agree, 6 = Strongly Agree. Responses of 4–6 are considered positive.

**Table 2. Psychometric properties of the evaluation form**

Factors	Average factor loading	Cronbach's $\alpha$	McDonald's $\omega$	Mean	SD	1	2	3
1. Perception of program attributes	0.91	0.97	0.97	3.89	1.28			
2. Appreciation of law abidance leadership	0.88	0.97	0.97	4.39	1.13	.84***		
3. Evaluation of self-paced learning mode	0.91	0.93	0.93	4.51	1.14	.64***	.76***	
4. Overall evaluation				4.13	1.39	.87***	.82***	.68***

\*\*\*  $p < 0.001$