ARTICLE CRITIQUE

Evaluating an Online Stress Management Intervention for College Students.

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1. What type of research design was used in this study? (1)

This study was developed by Hintz et al and has taken advantage of the experimental design to adequately evaluate its hypothesis. For the purpose of this study, experimental design allows the study to obtain data that can be analyzed to reach the best possible validity and objective.

2. Outline the primary purpose of this study

Stress has been reported as a significant issue for undergraduate students, in which it could affect students mentally and physically and reflect on health-related behaviors (Hintz et al., 2014). These behaviors are such as tobacco use, alcohol and other drug use and etc. (Lust et al., 2013). However, there are various barriers for students to seek mental-health related help, i.e. the lack of time and the stigma (Hintz et al., 2014). Hence, the initial purpose of the study was established, to the extent of the development and evaluation of the effectiveness of the theory-based online intervention on helping students to cope with stress more effectively.
3. Why was this study needed? (e.g., what gaps in the literature were being addressed by this study?) (3)

Online intervention, as a coping mode for mental-health related issues has increased in popularity even though there is few percentage of sampled students were not willing to try this intervention (Klein & Cook, 2010). One of the reasons why this study was needed is because of the lack of examining the relationship between present control and the positive outcome carried out by the online intervention experimentally (Hintz et al., 2014). On the other hand, there are some popular online interventions, such as the MyStudentBody: Stress (Hintz et al., 2014) and the Self-guided Mindfulness-based Online Interventions among undergraduate students already (Hintz et al., 2014). As well, there are studies (Cavanagh et al. 2013) constructed to examine the effectiveness of these interventions. However, these studies were argued that they lack of the comparison between variables and additional research is needed (Hintz et al., 2014). Consequently, this experimental study was developed to examine how the intervention with raised present control better the outcomes (i.e., perceived stress, health-promoting behaviors).
4. Explain the major theory or theories underpinning this research. (3)

This research was underpinned by Bandura’s self-efficacy theory (1996). Self-efficacy was described as people’s beliefs in their capabilities to select and develop their own social environment (Bandura 1996); and coping self-efficacy was defined as people’s capability to engage in coping behaviors when they are in a negative situation. Therefore Hintz et al. (2014) believed that self-efficacy theory has some similarities to the idea of ‘present control’; as the present control was constructed to focus on one’s capability to deal with the stressor in the present aspect (Hintz et al., 2014). Also the Bandura’s theory has given support and sources for this study to undertake the increase of present control (Hintz et al., 2014). These sources were introduced in Bandura’s theory (1996) and applied to this study: mastery experiences, in which this study used by offering online exercise to encourage participants to use present control; vicarious experience, was used by providing participants with other students’ present control and stress related experiences; social persuasion, was utilized with the use of videos from research experts for participants to understand their own intervention (Hintz et al., 2014). With other literature reviewed, Hintz et al (2014) believed that their intervention should focus on one singular concept of present control.
5. Explain any hypotheses put forward by the researchers. (2)

Hypotheses were taken shape with two pilot studies constructed to test the feasibility of the present control intervention, for the advancement of such intervention and measuring the outcomes. With the result of those two pilot studies, two hypotheses were formed: the present control intervention (PCI) group and PCI plus received feedback group should have much more increases of present control significantly than the group has stress information only. This results in the second hypotheses that, the two PCI group would decrease much more in the primary outcomes (i.e. perceived stress, depression, anxiety) than the stress-information-only group (Hintz et al., 2014).

6. Provide a brief summary of the method used in this study
   (participants, measures/apparatus, procedure, design). (3)

Psychology students were selected from different universities in 2012 to participate in Hintz et al.’s study (2014). There were only 223 (out of 404) students were qualified to participated in the study because of the completion of pretest and began the intervention. Participants were randomly assigned in three groups: the PCI group, PCI group plus feedback group, and the stress-information-only group (Hintz et al., 2014). Also, there was a follow-up survey for those who started from the intervention. The design of the intervention was consisted with four modules: Module 1 provided information about common stressor and outcomes among college student; Module 2 provided clarification about past, present and future control and the positives outcomes particular associated with present control; Module 3, information about the pitfall avoidance for the present
control; Module 4, contained video and enhancement for the knowledge they had learnt (Hintz et al., 2014). Measures of the study included the Present Control, to assess participants’ perceptions on stressors over the controls; the Depression, Anxiety, and Stress, were assessed and examine how much applied to participants for the last two weeks with the use of DASS model (Lovibond & Lovibond, 1995); the Perceived Stress, demonstrated with the use of the PSS (Cohen, Kamarck, & Mermelstein, 1983); and the Intervention Feedback that assessed participants’ rating toward the intervention. In short, the design and measurements aimed to test the hypotheses comprehensively and accurately.

7. Without referring to specific statistical terms, provide a brief description of the main findings reported within the results section of the report. (2)

The findings of this study showed that, there is no significant difference between PCI and PCI plus feedback groups in the size of effect or the effectiveness in increasing present control (Hintz et al., 2014). However, there are always significant differences in comparison with the stress-information-only group and both the PCI and the PCI plus feedback groups. The findings have demonstrated that stress-information-only group was relatively insufficient, regardless the effectiveness of present control or the size of effects. Likewise, the PCI and PCI plus feedback groups resulted in less perceived stress, anxiety, and depression significantly than the stress-information-only group (Hintz et al., 2014). Accordingly, participants had given moderate ratings for the helpfulness and the remembrance of the material given. In short, findings have corresponded to authors’ first
hypothesis, in which the PCI groups would be relatively more effective than the stress-information-only group.

8. Describe the extent to which support for the theory or theories underpinning the research was evident from the findings in this study. (3)

Theory that the study underpinned was demonstrated and relevant to the findings. One of the reasons why Hintz et al. drew on Bandura’s (1996) theory is that the well-developed module in his study provides important information and sources of self-efficacy for the researchers to develop the study. Findings were demonstrated with the inclusion of mastery experience, in which provides online exercises to keep participants engaged; vicarious experience by sharing other students’ experiences in relation to present control and stress; and social persuasion which informed students with interactive sources.

9. Briefly explain whether and how the findings did/did not support the hypothesis/hypotheses. (3)

As suggested above, the purpose of the study was to develop an online intervention that could increase the present control to be effective among undergraduate students, to determine the efficacy of stress-related outcomes. With the purpose of this study, hypotheses (Hintz et al., 2014) were formed and demonstrated by the findings of the
study adequately. One of the hypotheses was that both PCI groups would increase the present control more significantly than the stress-information-only group, and it was demonstrated with the use of ANCOVA (Hintz et al., 2014). The conduction of ANCOVAs was to evaluate the between-group differences in present control at the postintervention and the follow-up (Hintz et al., 2014). The other hypothesis was that the interventions of two present control groups would be more effectively in the decrease of primary outcomes (i.e. stress-related behaviors) (Hintz et al., 2014). The method of MANCOVA was used to demonstrate the hypothesis by assessing the group differences at postintervention regard to the four variables: three DASS subscales and perceived stress (Hintz et al., 2014).

10. Describe the limitations of the study specified by the researchers, and explain whether they are adequate. Are there additional limitations relevant to this study? (4)

There are four limitations were pointed out by the researchers. These limitations could result in this study’s validity and reliability. First, it was the limitation of sampling with the majority of female and White people only, which limited the study’s generalizability in the real world; secondly, the study could be questioned regard to the operationalization as psychology students were the participants that being chosen and credited to be part of the study. In addition, having psychology students participated in such study, it could also affect the study’s generalization as psychology students might have related knowledge and hold different perceptions of these interventions compare to other populations. Likewise, culture difference would be a difficulty if researchers try to apply the study to...
other culture groups, as the study was limited to White cultural group. Thirdly, the use of self-report measure could leave the study subjectively and impact on its credibility. The fourth limitation as researchers suggested is that the follow-up assessment group could have conducted more frequently and to monitor participants’ improvement (Hintz et al., 2014).

11. What implications does this study have for the ‘real world’? (3)

The study provides an important source of information for the ‘real world’ to cope with stress-related problem more effectively and efficiently using online intervention. The Hintz et al (2014) has identified that increasing the present control for the interventions could have medium to large effects. Consequently, stress-related problems were reduced significantly among both the PCI and PCI plus feedback groups. Even though there was no significant difference in between the PCI groups, providing feedback was a favorable option for the students (Hintz et al., 2014). By applying this study’s findings to the ‘real world’, it enhances people’s understanding about how an effective online intervention could reduce one’s stress related issues.
12. Comment on the reliability and validity of the dependent measures used in the study. (2)

The study (Hintz et al., 2014) has been controlling except the independent variables and by randomly assigning people to the group that could maximize the causal relationship between the variables to greater the certainty. In total of three interventions including the follow-up session, measures were completed one by one with repeated method to maintain the reliability (Hintz et al., 2014). Even though the completion rate of the study (Hintz et al., 2014) was much lower then the initial participants, procedures of the study were adequately carried out and maintain the internal validity.
Reference


