Ucar, H., & Bozkurt, A. (2019). Using motivation, volition, and performance model to overcome online procrastination. In T. Erdoğan, & S. Özer. (Eds), *Current Academic Studies in Social Sciences* (pp. 105-112). Cetinje-Montenegro; IVPE.
ISBN: 978-9940-540-64-7

USING MOTIVATION, VOLITION, AND PERFORMANCE MODEL TO OVERCOME ONLINE PROCRASTINATION

Hasan Ucar[*] & **Aras Bozkurt** [**]

1. Introduction

The profound effects of information and communication technologies (ICTs) have altered and contributed to many domains of our lives. Education, especially online distance education, is at the forefront of these domains. The number of learners in online distance education stream has been growing steadily. The number of courses that are given through online distance education is also increasing in the same way. Even though ICTs have made significant contributions to the facilitation of the educational routines, it is still vague if these efforts help online learners to overcome all motivational problems such as academic procrastination.

Procrastination is an inexplicable issue. Yet, it can be defined as a deliberate delay by the learners despite predictable negative results. Procrastination is also described as a result of failure or lack of in self-regulation skills (Tuckman 1991; Grund & Fries, 2018; Hen & Goroshit, 2018; Rebetez, Rochat, Barsics, & Van der Linden, 2018). When learners occupy themselves with the procrastinator behavior, they usually abstain from pursuing a planned goal and, instead, involve in easier and enjoyable behaviors (Giguère, Sirois, & Vaswani, 2016). Moreover, if the learners do not have confidence in achieving the course, they may have unfavorable behaviors such as avoidance, procrastination, or being unhappy outside the class. Even successful learners who do not have confidence may be adversely affected by procrastination behavior (Keller, 2010). The teachers want the learners to be motivated to achieve; they do not want them to be procrastinated.

The success of learners in distance learning depends on many factors. Volition and motivation are two of the most important aspects of learning processes (Deimann & Bastians, 2010; Keller, 2008a; 2010). Similar to its role in face-to-face learning environments, motivation and volition are also pivotal drivers in course completion and success in distance education context. In distance education, the motivation, volition, and performance (MVP) model that is ARCS-V (initials of Attention, Relevance, Confidence, Satisfaction and Volition) model of motivational design is an internationally-approved model for increasing learner

[*] (Ph.D.), Bilecik Seyh Edebali University.
[**] (Ph.D.), Anadolu University.

motivation (Choi & Johnson, 2005; Keller, 2010). According to Keller (2010), motivational design model includes instructional, environmental and motivational strategies, thus encouraging operational and self-regulatory learning behavior which is the substantial variable in online procrastination case. In online courses, a high level of absence or procrastination is associated with a low level of motivation and volition, demonstrating that online distance learners clearly experience significant motivational problems and procrastination (Deimann & Bastiaens, 2010; Keller, 2008a, 2008b, 2010). As a solution to these drawbacks, utilizing the MVP model and the ARCS-V design can be a remedy for online academic procrastination in online distance learning environments.

Thus, given the number of courses and learners in the online distance education area, understanding academic procrastination behavior of online learners, which is pervasive, are important to carry learners to their ultimate goal, that is success, in the education processes. In this regard, the aim of this present study is to propose the MVP model and ARCS-V design to overcome the academic procrastination behavior in online distance learning environments. The study covers the possible causes of online academic procrastination behaviors of online distance learners and the use of the ARCS-V motivational design process in dealing with academic procrastination in online distance education.

2. Online Academic Procrastination

Procrastination has many definitions for different contexts. It can be defined as a kind of impairment in motivation or volition of a person (Klassen, Hannok, & Krawchuk, 2011). Academic procrastination is the most studied procrastination type in learning processes. Online academic procrastination is a kind procrastination that is pertinent to tasks and activities in online learning environments (Steel & Klingsieck, 2016). Klassen et al. (2011) also describes procrastination as an anti-motivation condition. For this reason, procrastination might have a negative effect on academic performance (Kim & Seo, 2015).

3. Academic Procrastination in Online Distance Learning

Academic procrastination is a pervasive behavior among learners (Ko & Chang, 2018; Steel, 2007; Uzun, Ferrari, & LeBlanc, 2018). The online distance learning environments are vulnerable to procrastination case (Tani, 2017; Tuckman, 2007). Moreover, Internet and online technologies have caused learners to procrastinate online (Lavoie & Pychyl, 2001; Reinecke, Meier, Aufenanger, Beutel, Dreier, & Quiring, 2018). In online distance education, learners have a more flexible study program than face to face learners. Moreover, online learners are more responsible for their learning process than face-to-face learners. Therefore, the online learners

need to engage in self-regulatory behaviors as they are not physically in the same place with their instructors (Tuckman, 2007). Because of this situation, it was reported in the various studies (Keller, 2010; Tuckman, 2007) that online distance learners are more inclined to academic procrastination. Therefore, this behavior pattern drives the online learners to violate the expectations or aims set by course teacher. Within this context, in order to overcome the academic procrastination behavior in the online learning environment, Keller's MVP model is thought to be an effective model in the instructional design processes. Through this model, which integrates various theories and practices, educators can motivate online learners in a systematic way with ARCS-V motivational design process to help them to overcome the online academic procrastination behaviors. For example, the teachers can apply deadlines, strategies and other control variables to positively influence the procrastination-prone learners (Keller, 2010).

4. A Remedy for Online Procrastination: The MVP Model and ARCS-V Motivational Design

Keller's MVP model (Keller 2008, 2010, 2017) inegrated many theories, approaches, and research to procure counselling to instructors. Each factor in the MVP model, that is ARCS-V design, integrates many such theories and approaches, and the model allows for the adoption of a holistic approach to motivation. The most important of these theories are: Gagne's Nine Events of Instruction (1977) and Merrill's Component Display Theory (1983). However, the motivational components of these theories are limited to attracting and engaging the learners' attention at the beginning of instruction and maintaining the behavior by providing positive reinforcers (Keller, 2010). Although the MVP model is complicated, it pursues a systematic and rational progress (Keller, 2017). The model follows a systematic design process in order to implement the model to many kinds of learning environments. However, the ARCS-V model of motivational design is not an instructional design model, but rather a motivational design model that is used to develop learning environments within a technological context, and that makes use of systematic instructional design methods to increase learners' performances and increase their motivation through instructional design processes (Cheng & Yeh, 2009; Keller, 2010). The ARCS-V model of the motivational design was developed in response to the lack of importance attached to the learners in learning environments and it has been implemented in many different learning contexts successfully (Francom & Reeves, 2010; Wu, 2018).

The ARCS-V model of the motivational design was initially designed for face-to-face learning environments, but with changes in teaching

styles, its applicability for distance learning environments is now also possible, and the number of the research conducted into this matter has increased (Keller & Suziki, 2004; Keller, 2010). Keller (2010), however, criticizes that instructional design models focus on stimuli and results in education, thus showing that the behavior in question is a product of a person or environment. ARCS-V motivational design intends to enhance learners' motivation with five substantial components (Figure 1). These are: arouse curiosity among learners regarding the course subject and contents (attention); relating the course contents and outcomes to the learners' goals (relevance); generating confidence (confidence); learners gain evidence and fulfilling results in response to accomplishments during the course (satisfaction); the experiencing of effective results and the acquisition of self-regulatory skills in learners (volition) (Keller, 2010, 2017; Keller & Deimann, 2012). In the ARCS-V model, like many other motivation theories, the motivational factors depend on the interaction between the learner and the instructor. Besides, in the ARCS-V design model motivational and volitional communications are the most fundamental tools to increase the learners' motivation.

Figure 1: ARCS-V motivational design process

Instructional design is a constantly changing and developing field, although how the field is defined varies in line with this change. According to Naudi (2013), instructional design refers to anything to do

with learning and teaching processes. These processes include analyses of learners and the learning environment, the identification of objectives and outcomes, the identification of instructional tools and techniques, and the carrying out of mid-term evaluations, feedback and evaluation steps. In its broadest sense, instructional design is defined as a process through which effective, productive and attractive learning systems are developed, with the aim of identifying the educational needs of the target group and meeting their specific needs (Reiser, 2012; Shearer, 2013). Unlike in the motivational design, the learners' attention is drawn, and they are given reinforcers in instructional design (Keller, 2010). That said, these situations cannot account for motivation in learners. In the motivational design, it is aimed to encourage and sustain the learners' efforts to bring about positive changes in their learning processes and lives.

The motivational design process has structural similarities to traditional instructional design processes (Keller, 2010; Reiser, 2012). At this point, learners' motivational analysis could be performed simultaneously with an activity analysis as a part of the design process. Instructors or instructional designers can adopt various instructional models to fit their own instructional contexts, although a motivational analysis, under normal circumstances, should be carried out following the instructional analysis (Keller, 2010). As a solution to the academic procrastination, utilizing an analyzing process is suggested before the ARCS-V motivation model strategies can be used in distance learning environments. It is suggested that suitable motivational strategies that can be used in the teaching process should be ascertained after analyzing the learners, learning environment and course materials (Keller, 2010).

According to Keller (2010), the motivational design is not an independent design model. The model is a component of an integrative design approach to learner motivation. The motivational design associates the instructional design and factors related to learning environments. When designing the course, learning environments, the course structure, the learners, and the online learning system through which the course is to be given are taken into account. In instructional design, on the other hand, teaching materials are developed in line with the instructional goals for the techniques and approaches to be utilized in the design of the instructional system. As a last, in the motivational design process, the necessary strategies need to be purposely designed and developed to make learning appealing to the learners.

5. Conclusion

In this study, we suggest Keller's MVP model and ARCS-V design to overcome the academic procrastination in online distance learning

environments. As the online learners are prone to procrastination (Tuckman, 2007), and today's online technologies give an opportunity to learners to procrastinate online (Lavoie & Pychyl, 2001) instructors can use systematic strategies and other control variables to positively influence the online procrastinators. Through the MVP model, the instructors should analyze the learners, learning environment and course materials. Then, communication strategies to gain the attention of the learners, build relevance, generate confidence, satisfy the learners, and affect the learners' volition should be utilized.

References

CHENG, Y. C., & Yeh, H. T. (2009). From concepts of motivation to its application in instructional design: Reconsidering motivation from an instructional design perspective. *British Journal of Educational Technology*, *40*(4), 597-605.

CHOI, H. J., & Johnson, S. D. (2005). The effect of context-based video instruction on learning and motivation in online courses. *The American Journal of Distance Education*, *19*(4), 215-227.

DEIMANN, M., & Bastiaens, T. (2010). The role of volition in distance education: an exploration of its capacities. *International Review of Research in Open and Distributed Learning*, *11*(1), 1-16.

FRANCOM, G., & Reeves, T. (2010). John M. Keller – A significant contributor to the field of educational technology. *Educational Technology*, 55-58.

GIGUÈRE, B., Sirois, F. M., & Vaswani, M. (2016). Delaying things and feeling bad about it? A norm-based approach to procrastination. Sirois, F. M., & Pychyl, T. A. (Eds.). In *Procrastination, health, and well-being* (pp. 189-212). Academic Press.

GRUND, A., & Fries, S. (2018). Understanding procrastination: A motivational approach. *Personality and Individual Differences*, *121*, 120-130.

GRUNSCHEL, C., Patrzek, J., Klingsieck, K. B., & Fries, S. (2018). "I'll stop procrastinating now!" Fostering specific processes of self-regulated learning to reduce academic procrastination. *Journal of prevention & intervention in the community*, *46*(2), 143-157.

HEN, M., & Goroshit, M. (2018). The effects of decisional and academic procrastination on students' feelings toward academic procrastination. *Current Psychology*, 1-8.

KELLER, J. M. (2008a). First principles of motivation to learn and e-learning. *Distance Education*, *29*(2), 175–185.

KELLER, J. M. (2008b). An integrative theory of motivation, volition, and performance. *Technology, Instruction, Cognition, and Learning*, *6*(2), 79-104.

KELLER, J. M. (2010). *Motivational design for learning and performance: The ARCS model approach*. New York, NY: Springer.

KELLER, J. M. (2017). The MVP model: overview and application. *New Directions for Teaching and Learning*, *2017*(152), 13-26.

KELLER, J. M., & Deimann, M. (2012). Motivation, volition, and performance. In R. A. Reiser & J. V. Dempsey (Eds.). *Trends and issues in instructional design and technology*. Boston: Pearson Education.

KELLER, J. M., &Suzuki, K. (2004). Learner motivation and e-learning design: a multi-nationally validated process. *Journal of Educational Media*, *29*(3), 231-239.

KIM, K. R., & Seo, E. H. (2015). The relationship between procrastination and academic performance: A meta-analysis. *Personality and Individual Differences*, *82*, 26-33.

KLASSEN, R. M., Hannok, W., & Krawchuk, L. L. (2011). Procrastination. In R. J. Levesque (Ed.), *Encyclopedia of Adolescence,* (pp. 2181-2186). New York, NY: Springer.

KO, C. Y. A., & Chang, Y. (2018). Investigating the relationships among resilience, social anxiety, and procrastination in a sample of college students. *Psychological Reports*, *121*(0), 1-15.

LAVOIE, J. A., & Pychyl, T. A. (2001). Cyberslacking and the procrastination superhighway: A web-based survey of online procrastination, attitudes, and emotion. *Social Science Computer Review*, *19*(4), 431-444.

NAIDU, S. (2013). Instructional design models for optimal learning. *Handbook of distance education,* 3, 268-281.

REINECKE, L., Meier, A., Aufenanger, S., Beutel, M. E., Dreier, M., Quiring, O., … Müller, K. W. (2018). Permanently online and permanently procrastinating? The mediating role of Internet use for the effects of trait procrastination on psychological health and well-being. *New Media & Society*, *20*(3), 862–880. https://doi.org/10.1177/1461444816675437

REISER, R. A. (2012). What field did you say you were in. In R. A. Reiser & J. V. Dempsey (Eds.). *Trends and Issues in Instructional Design and Technology*, (3rd Ed.) Boston: Pearson.

REBETEZ, M. M. L., Rochat, L., Barsics, C., & Van der Linden, M. (2018). Procrastination as a self-regulation failure: the role of impulsivity and intrusive thoughts. *Psychological reports*, *121*(1), 26-41.

SHEARER, R. (2013). Theory to practice in instructional design. In M. G. Moore (Ed.), *Handbook of distance education* (3rd ed., pp. 251–267). New York, NY: Routledge.

STEEL, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, *133*(1), 65-94.

STEEL, P., & Klingsieck, K. B. (2016). Academic procrastination: Psychological antecedents revisited. *Australian Psychologist*, *51*(1), 36-46.

TANI, K. (2017). Academic procrastination and the effect on students' results for ICT students. *International Journal of Cyber Behavior, Psychology and Learning*, *7*(2), 31-35.

TUCKMAN, B. W. (1991). The development and concurrent validity of the procrastination scale. *Educational and Psychological Measurement*, *51*(2), 473-480.

TUCKMAN, B. W. (2007). The effect of motivational scaffolding on procrastinators' distance learning outcomes. *Computers & Education*, *49*(2), 414-422.

UZUN, B., Ferrari, J. R., & LeBlanc, S. (2018). Put aside procrastination: Positive emotional outcomes from self-forgiveness for delays. *North American Journal of Psychology*, *20*(1).171-186.

WU, T. T. (2018). Improving the effectiveness of English vocabulary review by integrating ARCS with mobile game-based learning. *Journal of Computer Assisted Learning*, *34*(3), 315-323.