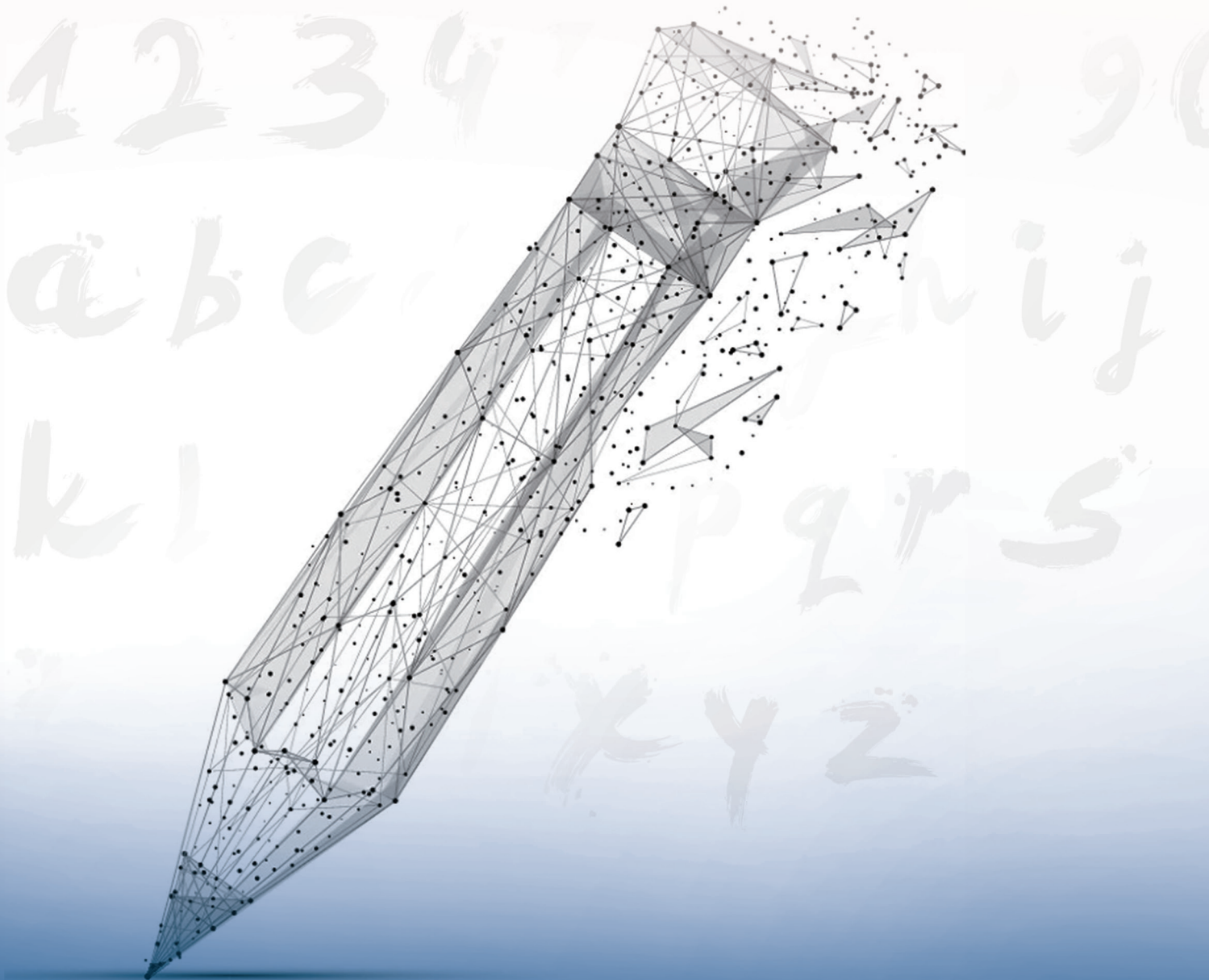




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ARTICLE

An Integrated Model for Sport Consumer Repurchase Intention: A Case in the Commercial Martial Arts Schools

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ABSTRACT

The retention of customers is fundamental to the success of sport organizations for a variety of reasons, not the least of which is it is less expensive for an organization to keep a current customer than to gain a new one. Since customer repurchase intention is an important indicator to predict repurchase behavior, exploring the factors that influence this behavior has important theoretical and practical implications in the commercial martial arts school market. Although previous research provides a foundation for the factors that influence a customer's repurchase intention, additional empirical work is warranted. This study was designed to integrate the findings of previous studies and examine how utilitarian factors (perceived value and switching cost), a hedonic factor (perceived enjoyment), and social/psychological factors (confirmation and satisfaction) directly or indirectly influenced consumers' repurchase intentions in the context of commercial martial arts schools. The results indicated that customer satisfaction had the strongest impact on customer repurchase intention, followed by perceived enjoyment, switching costs, confirmation, and perceived value.

1. Introduction

Originating in Asia, martial arts are multifunctional sports that include combative sport (Gartland, Malik, & Lovell, 2001,^[22] Kochhar, Back, Mann, & Skinner, 2005),^[42] self-defense systems (Daniels & Thornton, 1992),^[13] physical fitness (Fong, Fu, & Ng, 2012),^[19] and psychological intervention programs (Baron & Faubert, 2005;^[2] Kim, Zhang, & Ko, 2009).^[40] Since the 1980s, participation in the martial arts has increased tremendously; the estimated number of those engaged in learning and practicing martial arts was 8 million in the United States (Zetaruk, Violan, Zurakowski, & Micheli,

2005).^[72] According to IBISWorld (2021), there are roughly 45,129 martial arts schools were operating in the United States (U.S.). The number of businesses in the commercial martial arts industry has grown 15.6% per year on average over the five years from 2016 to 2021.

Membership fees are the primary source of revenue for most commercial martial arts schools. Therefore, how to retain and target more members is regarded as a challenge that most commercial martial arts schools share. The prior empirical and theoretical focus has predominantly been on customer targeting. This customer targeting includes motives of martial arts participants

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(Ding, Chen, Zou, & Zian, 2015),^[15] marketing demand for martial arts schools (Kim et al., 2009), and benefits of engaging in martial arts (Baron & Faubert, 2005,^[2] Brudnak, Dundero, & Van Hecke, 2002;^[7] Lakes & Hoyt, 2004;^[44] Wall, 2005).^[68] To our knowledge, few research studies have been conducted on retention marketing within the context of martial arts participants (Kim et al., 2015;^[37] Kim & Zhang, 2019).^[39] Furthermore, little is known about how various sociological and psychological factors influence consumers' repurchase intentions in the context of commercial martial arts schools. Since customer repurchase intention is an important predictor of repurchase behavior, exploring the factors that influence repurchase behavior has important theoretical and practical implications in the market. This study was designed to integrate the findings of previous studies and test how utilitarian factors (perceived value and switching costs), a hedonic factor (perceived enjoyment), and social/psychological factors (confirmation and satisfaction) directly or indirectly influence consumers' repurchase intentions in the context of commercial martial arts schools. By closing this gap in the literature, martial arts school managers may use the information to better understand their consumers' consumptive intentions after purchase, expand their market base, and increase the likelihood of repeat purchase.

The retention of customers is fundamental to the success of sport organizations for a variety of reasons, not the least of which is that it is less expensive for an organization to keep a current customer than to gain a new one. Keiningham, Vavra, Aksoy, and Wallard (2005)^[35] concluded that it typically costs five times more to acquire a new customer than to retain a current customer. In addition, current customers are a potential base for cross-selling and are also a valuable source of new ideas for business strategies (Liu-Thompkins & Tam, 2013;^[45] Juttner & Wehrh, 1994).^[33]

As mentioned above, membership, among other revenue sources, contributes greatly to commercial martial arts school profitability. Therefore, every commercial martial arts school invests substantial time and financial support to this endeavor. The goal is to increase consumer frequency of purchase. However, despite these efforts, consumers' attitudes and needs ultimately determine whether an item is purchased repeatedly. Consequently, in addition to considering the environment and organizational factors that influence repurchase intention, marketing strategists must also consider the psychological and social forces that are likely to condition consumer behavior. That is, what goes on inside the consumer's mind is important. This is the principle behind the study of consumer behavior in

the field of marketing. In today's increasingly competitive marketplace, the sport market must be concerned not only with the who, what, when, and where of marketing, but also with why consumers repurchase the product. To be successful in an increasingly crowded marketplace, the marketers must analyze and understand the factors that influence consumer's repurchase intentions.

2. Review of Literature

2.1 Customer Satisfaction

Customer satisfaction is generally defined as "the degree of overall pleasure or contentment felt by the customer, resulting from the ability of the service to fulfill the customer's desires, expectations and needs in relation to the service" (Hellier, Geursen, Carr, & Richard, 2003, p. 1765).^[29] In the context of martial arts or the sport fitness industry, members may be satisfied with the quality of service and the overall environment of the facility. They may also be satisfied with the outcome of the training or practice. Conceptually, a higher level of satisfaction with the purchased experience should result in higher repurchase intention by customers (Jones, Mothersbaugh, & Beatty, 2000).^[34] Empirically, the relationship between customer satisfaction and repurchase intention has been examined by many research studies within the general business field. For example, Patterson and Spreng (1997)^[53] conducted a study to investigate the relationships among four key post-purchase constructs: perceived performance, satisfaction, perceived value, and repurchase intention. In a causal path empirical study of business-to-business professional services, it was found that customer satisfaction made the largest contribution toward predicting a customer's repurchase behavior. A similar study by Tsai and Huang (2007)^[64] yielded a result consistent with Patterson and Spreng (1997),^[53] which found that overall satisfaction had a direct, and positive, influence on repurchase intention in the context of online consumption. However, Bearden and Teel (1983)^[3] differed from the preceding authors in that they argued the repurchase intention is not always directly controlled by customer satisfaction. Rather, it is mediated by "attitude" at a satisfaction level. Hellier, Geursen, Carr, and Richkard (2003)^[29] confirmed this indirect relationship between repurchase intention and customer satisfaction by investigating 1,132 participants from insurance companies in the U.S. and found that switching costs mediate the relationship between customer satisfaction and repurchase intention. Dongji, Shenghui and Kai (2008)^[16] also reported the mediation effect between customer satisfaction and repurchase intention through

switching costs. Their survey of 201 participants from hairdressing facilities in China revealed that switching costs and customer satisfaction positively influenced the repurchase intention. By applying bootstrap analysis, they also concluded that the mediation effect is only partial. To investigate the relationship among customer satisfaction, switching costs, and repurchase intention, we proposed the following hypotheses:

H₁: Customer satisfaction has a significant positive influence on repurchase intention.

H₂: Customer satisfaction has a significant positive influence on switching costs.

2.2 Customer Confirmation

People have expectations for most behavior in life. These expectations may relate to consumption of a product or service and are typically about the performance or the quality of the product or service. For instance, when a pair of sneakers is purchased, there are certain expectations about quality, style, and/or comfort. Similar to sport, an attendee at an NBA game may expect a certain performance from a team or player. Research shows there are also expectations concerning the concessionaire service, cleanliness of the arena, parking, and etcetera (Chelladurai & Chang, 2000;^[9] Greenwell, 2001).^[24] In terms of the commercial martial arts industry, buying a martial arts school membership would typically lead to expectations about the experience. There may be expectations about the service at the front desk, the cleanliness of the locker room, the quality of the martial arts instructors, and etcetera. The discussion of consumer expectations directly leads to the concept of confirmation, which is defined as “a cognitive belief representing the extent to which consumers’ ex ante expectations of service use were met in reality, and refers to this evaluation process” (Wen, Prybutok, Xu, 2011, p. 16).^[70] In satisfaction theory, Oliver (1980)^[51] suggested,

Expectancies about the product or service are either confirmed or disconfirmed. Dis-confirmation then leads to satisfaction or dissatisfaction with the product or service. If the individual were satisfied, then he or she would purchase the product or service again. If not, then there would likely be no repeat purchase (p. 263).

Oliver’s (1980)^[51] expectation-confirmation theory (ECT) includes four primary constructs: (a) expectation, (b) perceived performance, (c) confirmation, and (d) satisfaction. According to the ECT framework, the process through which a customer reaches repurchase intention is as follows. First, customers have certain expectations about the service or product that they want to buy. Second, customers then decide to buy and use the service

or product. Third, customers evaluate the performance based on their initial expectations and determine if their expectations are confirmed or disconfirmed. After a period of initial usage, a perception of its performance is formed. This perception could either be positive or negative. Fourth, customers perceive satisfaction or dissatisfaction based on the level of initial expectations confirmed or disconfirmed. Finally, satisfied customers repeat the purchase and dissatisfied customers start to look for an alternative product or service. ECT has been used in marketing research, particularly in consumer behavior literature, to study consumer satisfaction and post purchase behavior (Oliver, 1980).^[51] The applicability of ECT has been tested in many contexts, such as automobile consumption (Oliver & Westbrook, 1993),^[52] restaurant service (Swan & Trawick, 1981),^[62] and camcorder repurchase (Spreng, MacKenzie, & Olshavsky, 1996).^[61]

Empirically, the link between confirmation and satisfaction, as well as that between confirmation and repurchase intention, has been well investigated in numerous studies (e.g. Harrolle, Trail, & Anderson, 2007;^[27] Trail, Anderson, & Fink, 2005;^[65] Wann, Dolan, McGeorge, & Allison, 1994;^[69] Wen et al., 2011).^[70] These studies were conducted not only within the general business field but also within the sport market. Harrolle et al. (2007)^[28] conducted a study with college football fans and found that when people’s expectations about the team’s performance are confirmed, then they are satisfied their purchase of tickets to attend games. Bhattacharjee (2001)^[5] investigated online banking users (n=1,000) via a cross-sectional field survey and found that confirmation and customer satisfaction made a significant contribution in predicting customer repurchase intention, explaining 42% of the total variance. In addition to the direct effect, confirmation also has an indirect effect on repurchase intention through customer satisfaction (Wen, Prybutok, & Xu, 2011).^[70] Therefore, we offered the following additional hypotheses:

H₃: Customer confirmation has a positive influence on repurchase intention.

H₄: Customer confirmation has a positive influence on customer satisfaction.

2.3 Perceived Value

Perceived value has been described in various ways. Rokeach (1973)^[57] defined value as “an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence” (p.5). He also suggested that “values are multifaceted standards that guide conduct” (p.13). Shampine and Gordon (1975)

^[60] noted, “values are constructs representing generalized behaviors or states of affairs that are considered by the individual to be important” (p.2). They also suggested that although individual values can be modified, they tend to endure over time. Perceived value, as a salient determinant of repurchase intention, has been discussed in various industries and can easily be confused with needs (Bettman, Luce, & Payne, 1998).^[4] Shampine and Gordon (1975)^[60] made the distinction between these two different constructs in this manner:

Needs are satisfied by specific responses or goals and are defined by the responses or goals themselves. Values, on the other hand, may be satisfied by a variety of behaviors. Needs require satisfaction. The individual may not feel compelled to behave in a specific way to satisfy a particular value. (p. 9)

It is evident from previous studies that value perceptions have an influence on sport consumer behavior (Braithwaite & Law, 1985;^[6] Trail & James, 2013),^[66] especially as professional sport teams and leagues, try to connect with fans through their values and personal goals. Thus, teams are hoping these connections will grow and increase fans’ repeat consumption. From a sport marketing perspective, sport consumers attach a great deal of importance to their perceptions of value. Using a sample of golfers’ buyers, Kim and Lough (2007)^[38] found that perceived value is a good predictor of intentions to revisit a sport business. In addition, Parasuraman and Grewal (2000)^[54] concluded that the construct of perceived value is the most important indicator of intentions to repurchase or revisit. Hence, we proposed the following hypothesis related to perceived value and repurchase intention:

H₅: There is a positive relationship between perceived value and repurchase intention.

2.4 Perceived Enjoyment

Perceived enjoyment has been described as a crucial factor in predicting consumers repurchase behaviors in multiple studies. In sports, there are many studies that investigate the relationship between perceived enjoyment of physical activity and the level of participation (DiLorenzo, Stucky-Ropp, Vabder Wal, & Gotham, 1998;^[14] Sallis, Prochaska, Taylor, Hill, & Geraci, 1999;^[58] Salmon, Owen, Crawford, Bauman, & Sallis, 2003).^[59] The perceived enjoyment scale is a subscale of the Intrinsic Motivational Inventory (IMI), which has been used in physical education and public health studies. It was originally developed by McAuley, Duncan, and Tammen (1989)^[47] to measure positive affect associated with involvement in physical activities in college students. Teixeira and Correia (2009)^[63] tested the applicability of

IMI within a population of fitness club members. Results from the confirmatory factor analysis provided support for the latent structures proposed by McAuley et al. (1989).^[47] The perceived enjoyment scale was shown to have acceptable reliability and validity.

In the specific context of this study, perceived enjoyment can be defined as the holistic sensation customers feel when they practice martial arts, which is studied as a flow theory (Csikszentmihalyi, 1990).^[11] When people consider their overall experience in practicing martial arts as enriching and enjoyable, they would be likely to return for more practice. Few studies have been conducted within the field of sport marketing to examine the relationship between perceived enjoyment and repurchase intention. Little is known about whether martial arts school members’ repurchase intention is influenced by perceived enjoyment. Thus, we proposed the following hypothesis:

H₆: A customer’s perceived enjoyment positively affects a customer’s repurchase intention.

2.5 Switching Costs

Perceived switching costs are regarded as the loss or sacrifice of time, money, and effort when a customer switches from one service provider to another one (Dongjin et al., 2008).^[16] According to Guiltinan (1989),^[25] switching costs may “entail search costs resulting from the geographic dispersion of service alternatives, as well as learning cost resulting from the customized nature of the service encounter” (p.262). Jackson (1985)^[32] stated that customers faced with high investment in switching costs were not likely to change vendors. Conceptually, when the perceived switching costs increase, the likelihood of a customer repeating purchase should also increase. For example, if martial arts participants find another recently opened martial arts school within 10 miles of their current school, considering the cost of time and travel expense to the recently opened school, they may decide to renew their membership and stay with their current school instead.

Studies have revealed that switching costs have an important influence on customer’s repurchase intentions. For example, Dongjin et al. (2008)^[16] found that higher perceived switching costs amounted to a higher level of repurchase intention. Another similar study by Jones et al. (2000)^[34] reached the same conclusion and supported the view that consumers who faced more investment in switching costs were more likely to remain with the same provider. We, therefore, propose the following hypothesis:

H₇: switching costs have a positive influence on repurchase intention.

2.6 Repurchase Intention

Repurchase intention can be viewed as a critical element in boosting a business organization’s profitability and ensuring long-term performance. According to social exchange theory, the consumer’s repurchase intention is “a willingness or preposition to maintain a transactional relationship with the current product or service provider, which is very similar to the consistent tendency of personal relationship in social psychology” (Dongjin et al., 2008 p.449).^[16] Customer retention, or repurchase intention, is one of the most important concepts in marketing (Gerpott, Rams, & Schindler, 2001;^[23] Verhoef & Franses, 2003).^[67] Repurchase intention may be especially important in the commercial martial arts market, which primarily operates by membership fees. Reichheld and Sasser (1990)^[56] provided an excellent example of the impact customer retention can have on business success.

Profits rise as defection rates fall. Reducing defections by just 5% generated 85% of profits in one bank’s brad system, 50% more in an insurance brokerage, and 30% more in an auto-service chain. MBNA America has found that a 5% improvement in defection rates increases its average customer value by more than 125% (p. 170).

Despite the appropriateness of previous studies as a framework to explain repurchase intention across different industries, there are only a few research studies investigating the factors influencing repurchase intention in the sport industry. Among the few existing studies,

the relationship between repurchase intention and other constructs has been primarily studied in an isolated and piecemeal fashion. In fact, repurchase intention has shown to be a consequence in models of other focal constructs (Chiu, Chang, Cheng, & Fang, 2009;^[10] Kim, LaVetter, & Lee, 2006;^[36] Kwon, Trail, & James, 2007).^[43] However, the repurchase intention construct itself has not specifically been the focus of a formal model in the sport marketing literature. Not only is there no formal comprehensive model of repurchase intention, but there is also no formal model of the consequences of the construct in the sport marketing literature. Thus, there is a major theoretical gap in the sport marketing literature in this regard. The purpose of this study is to test a general model (Figure 1), which aims to describe the extent to which customer repurchase intention was influenced by customer satisfaction, perceived value, perceived enjoyment, switching costs, and confirmation.

3. Method

3.1 Procedures and Participants

A convenience sampling approach was utilized to collect data from current members of five martial arts schools in eastern coastal cities in the U.S. All questionnaires were provided to participants before or after practicing or training to prevent disruption to their practice routine. Following approval from the martial arts schools’ managers, questionnaires were administered on site and participants completed them in a convenient place

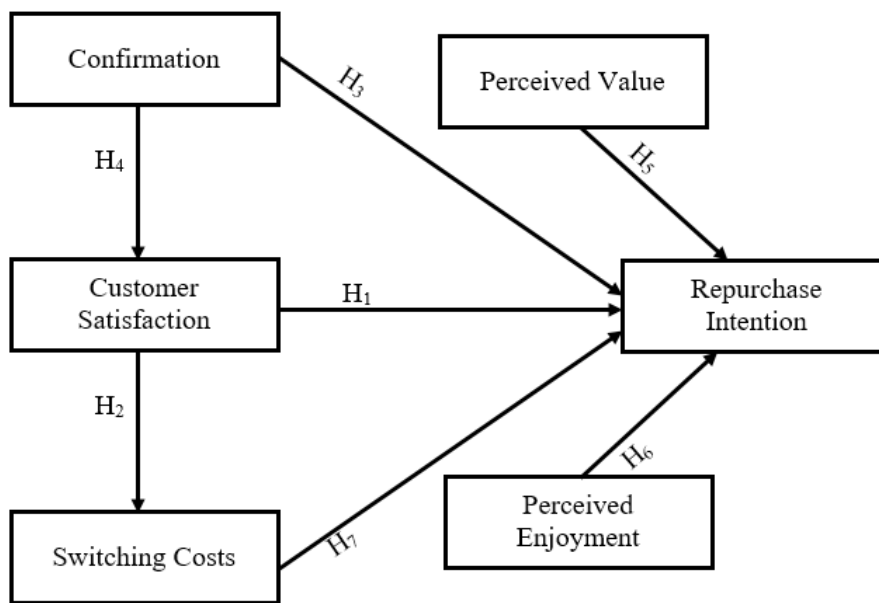


Figure 1. Proposed research model

(e.g., front desk, lobby). The collection was achieved with the cooperation of the staff of each school. Four hundred questionnaires were distributed, and 368 respondents were deemed usable for further analysis resulting in a response rate of 92%. Among those respondents, 41.1% ($n=151$) were female and 58.9% ($n=217$) were male. The sample consisted of mostly White ($n=239$, 64.9%), followed by Asian ($n=106$, 28.8%), Hispanic ($n=15$, 4.1%), and African American ($n=5$, 1.4%). Respondents ranged in age from 18 to 75 years, with a mean age of 38 years ($SD=16.2$).

3.2 Instrumentation

The survey instrument was comprised of two sections. The first section was regarding respondent's age, race, gender, and household income. Each descriptive question was measured with one item. Except for questions of age and length of membership which were asked as an open-ended question, all other demographic questions were asked by offering several choices. For example, there were two choices for gender question (male and female), six choices for race question (Asian/Pacific Islander, African American, White, Hispanic, multiracial, and other). The second section included 24 items measuring six constructs: (1) customers' satisfaction, (2) switching costs, (3) confirmation, (4) perceived value, (5) perceived enjoyment, and (6) repurchase intention. All questionnaire items were adapted from existing measures previously used in sport and leisure research studies. Two sport marketing scholars and two managers from the commercial martial school sector proofed the questionnaire to ensure its appropriateness in the context of the present study. Based on their responses, only minor changes were made regarding wording clarity and visual layout of the questionnaire. The 21 items were measured on a seven-point Likert Scale ranging from strongly disagree (1) to strongly agree (7). All scales used for the present study have been shown to be psychometrically sound instruments based on prior validation studies in various research settings. What follows is a summary of each scale.

To measure martial arts school members' perceived switching costs, the current study employed three items adapted from a study by Jones et al. (2000).^[34] Satisfaction and confirmation scales were adapted from Oliver's ECT (1980).^[51] The satisfaction scale included four items to measure participants' general level of satisfaction with their previously purchased membership. The confirmation scale was comprised of three items which asked respondents to indicate to what extent they agreed or disagreed with statements about their expectations. To

assess martial arts school members' perceived enjoyment, seven scale items adapted from McAuley and colleagues' (1989)^[47] framework was used, which measured a total of 7 items. This measure has been shown to have acceptable internal consistency in previous studies (McAuley et al., 1989;^[47] Ryan & Deci, 2000;^[55] Gao, 2008).^[21] Perceived value measurement was adopted from the work of Netemeyer et al. (2004).^[49] Repurchase intention was measured by three items adopted from Eggert and Ulaga (2002).^[17] This three-item scale has been widely used in the entertainment/leisure marketing literature and showed good reliability (Curtis, Abratt, Rhoades, & Dion, 2011).^[12]

3.3 Data Analysis

Data from the completed questionnaires were entered into a database and analyzed using SPSS 22.0 and Mplus 8.3. Initial data analysis consisted of examining the demographic information using means, standard deviations, values of skewness and kurtosis. The main data analysis for the current study was conducted in two stages: confirmatory factor analysis (CFA) and structural equation modeling (SEM) analysis. Since running structural equation modeling has been found to be sensitive to non-normal data (Kline, 2015),^[41] the normality of each observed variable was examined by skewness and kurtosis value before conducting the main data analyses. According to Kline (2015),^[41] a normally distributed response should have skewness values between 2 to -2 and kurtosis values between 3 to -3. The results indicate that all indicator variables' skewness and kurtosis values were between -2 to 2 and none of items showed a violation of data normality (Table 1).

CFA was performed to assess the psychometric properties of the scales. The maximum likelihood (ML) estimation method was used for parameter estimation. ML is an accepted estimation procedure used for confirmatory factor analysis (Lomax, & Schumacker, 2004)^[46] when data are continuous and multivariate normal. ML has also been found to be an acceptable estimation method for ordinal data when the number of response categories are above five, treated as continuous data, and are normally distributed (Mindrila, 2010).^[48] The reliability of constructs was examined using both Cronbach's α and composite reliability (CR; Fornell & Larcker, 1981).^[20] The threshold value of .70 was adopted to determine both acceptable α and CR value (Bagozzi & Yi, 1988;^[1] Nunnally & Bernstein, 1994).^[50] Convergent validity evidence was examined according to average variance extracted (AVE). Hair et al. (2006)^[26] suggested that AVE values for each factor should be above .5 to show acceptable convergent validity. Discriminant validity

was examined by comparing the square root of AVE with the inter-construct correlations. After the validity and reliability were examined, the evaluation of model fit was assessed using chi-square (χ^2), standardized root mean square residual (SRMR), the comparative fit index (CFI), normed fit index (NFI), and the root mean square error of approximation (RMSEA). Suggested by Hu and Bentler (1999),^[31] the following cut-off values were selected for this study: RMSEA < .06, SRMR < .08, and NNFI and CFI > .95. After measurement models were confirmed, SEM was conducted on the hypothesized model to test the seven hypotheses. Just as in CFA, the same fit index criteria were conducted to examine the structural model.

4. Results

4.1 Measurement Models

CFA was conducted for each measurement construct. The model fit indices for the initial CFA illustrated acceptable model fit for all measurements except for perceived enjoyment (chi-square = 120.27 [$df=14$], SRMR = .058, CFI = .94, NFI = .92, and RMSEA = .11). Post hoc model modification was made based on the modification indices (MIs; Kline, 2015). The correlation between residuals on item 3 (“I thought practicing martial arts was quite enjoyable.”) and item 4 (“I would describe practicing martial arts as very interesting.”) in the dimension of perceived enjoyment was added (MI = 64.12). This adjustment made theoretical sense because the two item wordings are similar and Pearson correlation between these two items was .7. The final modified model showed a significant improvement in model fit (chi-square = 56.15 [$df=13$], SRMR = .015, CFI = .99, NFI = .96, and RMSEA = .06).

Among the six latent constructs, all revealed acceptable AVE values, ranging from .51 (perceived enjoyment) to .63 (satisfaction) indicating good convergent validity. None of the square root AVE values were less than any of inter-construct correlations, providing good evidence for discriminant validity. All the values of Cronbach’s α (from .81 to .94) and CR (from .83 to .91) were well above the suggested cutoff criteria, indicating the items within the measurement constructs were reliable. All factor loadings in the final models were statistically significant at .5 and were greater than the recommended cutoff of .7 (Enders, & Bandalos 2001).^[18] Descriptive statistics, correlations, reliability estimates, and AVE values for measurement models are presented in Table 2.

4.2 Structural Model

After establishing the psychometric properties of

scores for the measurement models, a full structural model with all parameter estimates was computed. The original hypothesized model showed an acceptable fit to the data ($\chi^2 = 1010.27$, $p < .001$, $\chi^2/df = 3.55$, SRMR = .059, NFI = .95, CFI = .96, and RMSEA = .075). The values of CFI and NFI were all above the suggested value (>.95; Hu & Bentler, 1999). Only RMSEA was slightly above the suggested standard, with a value of .075. Although a specification was needed to further improve the overall model fit, a decision was made not to further conduct post hoc analysis due to two reasons. The first one was that the hypothesized model might lose theoretical sense from the specified model when a re-specification was initiated. For example, the MIs indices suggested that a path should be added from a latent variable repurchase intention to an indicator variable of confirmation. The second reason was that except for the RMSEA value, all other alternative model fit indices indicated good values. According to Cangur and Ercan (2015),^[8] RMSEA value tends to be sensitive to model complexity (i.e., number of indicator variables and estimated parameters).

The hypothesized structural model was estimated to examine the hypotheses with regard to the effects of confirmation, customer satisfaction, switching costs, perceived value, and perceived enjoyment on repurchase intention; the effect of confirmation on customer satisfaction; and the effect of customer satisfaction on switching costs. The tested model included a total of six latent constructs (Figure 2). When analyzing the paths among the six latent variables, one path was not statistically significant (customer satisfaction to switching costs). Therefore, hypothesis 2 was not supported. The standardized effect of customer satisfaction had the strongest positive influence on repurchase intention ($\beta = .79$, $p < .01$), indicating that when perceptions toward customer satisfaction increased by one standard deviation, repurchase intention would increase by .79 standard deviations. Perceived enjoyment ($\beta = .72$, $p < .01$) was the second strongest significant predictor of repurchase intention followed by switching costs ($\beta = .56$, $p < .01$), perceived value ($\beta = .42$, $p < .05$), and confirmation ($\beta = .42$, $p < .05$). Therefore, hypotheses 1, 3, 5, 6 and 7 were supported. The SEM results also indicated that confirmation had a significant positive impact on customer satisfaction. Therefore, hypothesis 4 was supported (Table 3). Confirmation, perceived value, perceived enjoyment, customer satisfaction, and switching costed accounted for 68% of the variance in repurchase intention, $R^2 = .68$. Confirmation accounted 36% of the variance in customer satisfaction, $R^2 = .40$.

5. Discussion

Martial arts schools, like many other businesses, rely on continuing memberships to provide a large portion of business income and considerable effort is devoted to this aspect of operations. The stated purpose of this study was to address gaps in the general sport marketing literature concerning whether customer repurchase intention is influenced by customer satisfaction, perceived value, perceived enjoyment, switching costs, and confirmation. To address this question, we proposed a research model based upon seven hypotheses related to the relationships between repurchase intention and each of the five stated post-purchase customer constructs in the context of commercial martial arts schools (Figure 1). Six of the seven hypotheses underlying this model were confirmed in this study.

The first hypothesis (H_1) related to the proposed positive relationship between customer satisfaction and repurchase intention was confirmed. That is, customer satisfaction at martial arts schools had a significant positive influence on repurchase intention. This finding confirmed those of prior studies in which customer satisfaction was also found to result in higher repurchase intention (Jones et al., 2000;^[34] Patterson & Spreng, 1997;^[53] Tsai & Huang, 2007).^[64]

The second hypothesis (H_2) concerned the proposed positive relationship between customer satisfaction and switching costs was not confirmed. That is, increased customer satisfaction did not result in increased perceived switching costs. This finding contradicts the mediation effects of switching costs between customer satisfaction and repurchase intention found by Hellier et al. (2003)^[29] and Dongji, et. al., (2008).^[16] One possible explanation is that, in a practical sense, satisfied customers may not give much thought or importance to the concept of switching cost, since going to another vendor may not even be a consideration. If the customers were dissatisfied and were considering other vendors, then perhaps switching costs would have had more relevance and importance in that context.

The third and fourth hypotheses concerned the proposed positive influence of customer confirmation on repurchase intention (H_3) and on customer satisfaction (H_4). Customer confirmation relates to the extent to which expectations were met (or not) by the purchased product or service and was based upon “expectancy.” In the current study of martial arts school customers, confirmation was found to significantly and positively influence repurchase intention (H_3) and to positively influence customer satisfaction (H_4). These findings would be expected from common

experience and have been confirmed in prior studies (Harrolle & Trail, 2007;^[27] Harrolle et al., 2007;^[28] Trail et al., 2005;^[65] Wann et al., 1994;^[69] Wen et al., 2011).^[70] That is, one would anticipate that having expectations fulfilled (or exceeded) by the martial arts school, along with the associated satisfaction, would reasonably lead to continued customer use of the service and ultimately customer loyalty. Both the customer and the school would then benefit.

The fifth hypothesis (H_5) concerned the proposed positive relationship between perceived value and repurchase intention was supported by the results of this study. Specifically, increased perceived value of membership was significantly related to an increase in repurchase intention. This positive finding was expected and confirmed those of previous studies, some of which were sport-related (Braithwaite & Law, 1985;^[6] Trail & James, 2013).^[66] Perceived value is a multifactor concept and may consist of a sense of belonging, warm social interactions, self-respect, self-fulfillment, fun, and enjoyment, among others (Homer & Kahle, 1988).^[30] These are certainly value dimensions that would be experienced by satisfied participants at a martial arts school.

The sixth hypothesis (H_6) focused on the proposed positive relationship between a martial arts school customer’s perceived enjoyment and repurchase intention and was supported by the study results. This significant finding confirmed that of prior studies linking perceived enjoyment with repurchase behaviors in the context of physical activity (DiLorenzo et al., 1998;^[14] Sallis et al., 1999;^[58] Salmon et al., 2003).^[59] Perceived enjoyment by participating in activities at martial arts schools would reinforce the desire by members to continue to participate. This finding helped fill a gap in the literature concerning perceived enjoyment and repurchase intention in a specific sport.

The seventh hypothesis (H_7) examined the proposed positive relationship between switching costs and repurchase intention was confirmed. Similar to the results of prior studies, the current study verified that martial arts school customers, who perceived higher switching costs to move to another school, also had higher levels of repurchase intention resulting in the decision to not move (Dongjin et al., 2008;^[16] Jones et al., 2000).^[34]

The proposed research model (Figure 1) was largely confirmed by the results of this study. Path coefficients have been used in a variety of ways for many years to examine the functional relations between variables (Wright, 1934).^[71] In the present study, path coefficients suggested some significant direct and positive effects by

the five constructs on repurchase intention among martial arts school members (Figure 2). The direct effects upon repurchase intention included the following, in descending order of effect (based upon path coefficient): customer satisfaction ($\beta = .79$), perceived enjoyment ($\beta = .72$), switching costs ($\beta = .56$), and confirmation and perceived value ($\beta = .42$, respectively).

The confirmed significant direct paths in the research model highlighted the crucial role played by customer satisfaction in increasing repurchase intention among members of martial arts schools. This suggests that managers of martial arts schools should focus attention on those specific factors that enhance customer satisfaction and customer perceived enjoyment because these constructs contributed significantly to repurchase intention and hopefully to a loyal membership base in both direct and/or indirect ways. As in many other circumstances, a satisfied customer is a repeat customer. This finding helps to fill a gap in the general sport marketing literature concerning the influence of different constructs on customer repurchase intention and in the specific case of martial arts schools.

Limitations and Future Research

Since the surveys were only conducted in one geographical area of the U.S. and were conducted at only one point in time for each survey, limitations are inevitable. Participants in other geographical areas, in areas with greater or fewer numbers of competing schools, and schools surveyed over a longer period may have resulted in a somewhat different group of martial arts school members with different expectations, experiences, impressions, and motivations. The current study was also limited in the selection of variables tested. Other repurchase intention predictors, such as household income and price fairness, could have been included in the model but were not. Future study in this specific area may focus on possible distinctions based upon frequency of participation, with the assumption that frequent users may have different motivations and experiences as compared to only occasional users. The goal would be to better understand the motivations (or lack thereof) of occasional users to thereby increase their satisfaction and participation.

Table 1 Descriptive Analysis for Each Item

	Mean	SD	Skewness	Kurtosis
Switching Costs				
SC1	5.05	1.45	-1.58	1.66
SC2	4.86	1.52	-1.08	1.29
SC3	5.18	1.40	-1.00	0.98
Customer Satisfaction				
CS1	5.78	0.82	-1.77	1.27
CS2	5.64	0.94	-1.23	1.41
CS3	5.96	1.44	-0.83	1.58
CS4	5.54	0.91	-0.93	0.93
Confirmation				
C1	4.82	1.55	-0.82	1.21
C2	5.34	1.49	-1.02	0.80
C3	5.24	1.56	-0.81	1.15
Perceived Enjoyment				
PE1	5.51	1.90	-1.40	0.93
PE2	6.13	1.65	-0.91	0.19
PE3	6.00	1.74	-0.73	1.25
PE4	5.62	1.11	-1.08	1.21
Perceived Value				
PV1	5.35	1.49	-0.85	1.31
PV2	5.60	1.45	-1.21	1.36
PV3	5.34	1.44	-1.01	1.01
PV4	4.99	1.36	-0.96	1.01
Repurchase Intention				
RI1	5.01	1.91	-1.09	1.04
RI2	4.79	1.94	-1.06	1.12
RI3	5.06	1.84	-1.16	-1.18

Table 2 Descriptive statistics, correlations, reliability estimates and AVE values for the latent variables

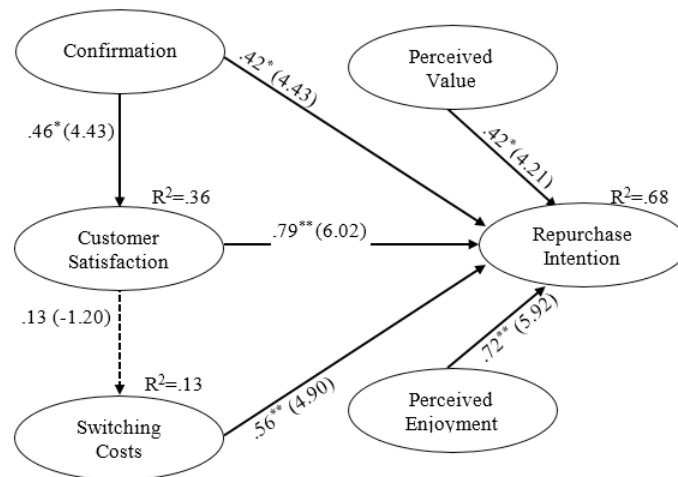
Variables	Mean	SD	α	CR	AVE	r					
Switching Costs	5.03	1.46	.89	.81	.55	1					
Customer Satisfaction	5.73	1.03	.86	.75	.58	.41*	1				
Confirmation	5.13	1.53	.90	.81	.53	.42*	.58*	1			
Perceived Enjoyment	5.82	1.60	.81	.83	.50	.51*	.61*	.50*	1		
Perceived Value	5.32	1.44	.76	.84	.51	.42*	.56*	.55*	.53*	1	
Repurchase Intention	4.95	1.25	.93	.89	.55	.58*	.65*	.58*	.49*	.42*	1

* p<.05

Table 3 Results of Hypotheses Test: Path Coefficients (β) and Significance Level (p).

Hypotheses	Path	β	p	Support
H1	Customer satisfaction → Repurchase intention	.79	**	Yes
H2	Customer satisfaction → Switching Costs	.13	.24	No
H3	Confirmation → Repurchase intention	.42	.02	Yes
H4	Confirmation → Customer satisfaction	.46	.01	Yes
H5	Perceived value → Repurchase intention	.42	.03	Yes
H6	Perceived enjoyment → Repurchase intention	.72	**	Yes
H7	Switching costs → Repurchase intention	.56	**	Yes

** p < .01



* p<.05, ** p<.01

Solid lines represent significant paths; dotted line represents insignificant path

Figure 2. Analytical results of repurchase intention model

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ARTICLE

Association between Teacher Candidates' Competency and First-Year Employment in Physical Education: A Comparison Study

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ABSTRACT

Physical education teacher education (PETE) programs prepare teacher candidates to be competent and employed in P-12 school settings. This study examined the relationship between competency and first-year job obtainment in physical education (PE). Participants included 111 teacher candidates from two schools. Participants' competency in content knowledge in Kinesiology and sub-disciplines (CKKH), content knowledge in sport and skill proficiency (CKSP), pedagogical content knowledge (PCK), and first-year job obtainment in PE were collected. Descriptive statistics, independent-samples *t* tests, and multiple logistic regressions were used to analyze the data. The overall sample showed participants were most competent in PCK, followed by CKSP and CKKH. Female participants were more competent in PCK than their male counterparts, and those at School A performed better in CKSP and PCK than their peers at School B. As a sample, more than half of the participants (55.9%) obtained PE jobs. There was a significance between the overall sample and female participants' competency in CKKH and their first-year employment in PE. This study was limited by sample size, variances in courses between the two schools, and by the defined timeline to clarify first-year PE employment. Implications regarding the importance of CKKH and first-year employment were discussed.

1. Introduction

Physical education teachers have the responsibility to help children and adolescents acquire the knowledge, skills, and dispositions necessary to develop and maintain a healthy and physically active lifestyle. At the elementary level, the focus is placed in building a strong foundation of movement concepts and motor skills. Through educational games, gymnastics and dance, children are to extend and deepen the roots of the movement elements. At the secondary level, the movement concepts advance to applied knowledge of tactical moves and team strategies while the motor skills become more specialized and

complex as adolescents are introduced to a wide variety of indoor and outdoor sports and physical activities. This is also the time that adolescents learn about the value of being physically active and discover different ways to practice such healthy living throughout their lifetime. Regardless of the level at which they are teaching, physical education teachers are expected to help their students understand and apply the knowledge and skills to participate in physical activities regularly, motivate them to continue such lifestyle after high school, and empower them to become productive citizens in the community.

In the United States, individuals who want to become physical education teachers in public schools are required

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to possess at least a bachelor's degree, obtain a teacher certification, and pass all competency exams. The first two requirements can be attained simultaneously through the completion of a physical education teacher education (PETE) program, preferably accredited by the Council for the Accreditation of Educator Preparation (CAEP) ^[1]. The curriculum in a CAEP-accredited PETE program typically includes coursework in general education, Kinesiology content area, knowledge of diverse learners and learning environment, and methodology and teaching in (health and) physical education, early field experiences, and a student-teaching component. According to Teacher.org ^[2], "competency exams vary from state to state and should be taken in the state where [the individuals] wish to teach. The exact licensing requirements [also] vary depending on the state where [the individuals] live." In the state of Kentucky, for example, students who are pursuing a degree and a licensure in physical education (P-12) must take and pass the Praxis Core Academic Skills for Educators test, the Praxis II Physical Education: Content and Design test, and the Principles of Learning and Teaching test ^[3]. After a statewide teacher certification is processed and granted, the teacher candidate will be eligible to apply for a teaching job in physical education.

A typical search process in the public school setting requires teacher candidates to submit an application package, including but not limited to the application, resume, letters of reference, transcripts, competency exam results, and background checks. It appears that the initial screening is based on the qualifications, experiences, references, grade point average (GPA), and test scores presented on the required documents. This documentation-based screening is an objective method to rank the applicants from the most qualified to the least. Those who meet the minimal standards will then be invited to conduct an in-person or virtual interview with the administrative team. This interview is a great opportunity for the teacher candidates to sell themselves to the hiring committee and convince them why they are the best person for the job, especially for those who may not stand out in the candidate pool. As a result, the most competent candidate on paper may not get the job, which led the researchers to ponder the question: Was there a significant association between teacher candidates' competency on paper and their first-year employment in physical education?

2. Review of Literature

Competency is defined as "the positive combination of knowledge, ability and willingness in the availability of the individual to cope successfully and responsibly with changing situations" ^[4]. For the subject-matter competency,

physical education teacher candidates are expected to demonstrate efficiency in the following six standards: *content and foundational knowledge, skillfulness and health-related fitness, planning and implementation, instructional delivery and management, assessment of student learning, and professional responsibility* ^[5]. To evaluate competency in the first standard, previous research has reported teacher candidates' knowledge in three major areas: Kinesiology subdisciplines, health-related fitness, and sports and physical activities.

Using the Assessment of Subdisciplinary Knowledge in Physical Education, Ayers found that the teacher candidates who took the seven-test assessment scored the best on the motor development and exercise physiology (76-87%) and the worst on the historical perspectives (59-68%) ^[6-7]. As for the knowledge of health-related fitness, a wide range of scores was reported (54.80-82.06%), which was very likely due to the different tests implemented in the research ^[8-14]. In a recent study, Chen and Jacques evaluated 53 teacher candidates' content knowledge in Kinesiology subdisciplines and health-related areas (CKKH) by calculating their GPAs in nine classes (e.g., biomechanics, exercise physiology, and preventive health and wellness) and revealed a 3.11 average on the 4.0 scale ^[15]. Compared to the knowledge in Kinesiology subdisciplines and health-related fitness, the teacher candidates scored the worst in the knowledge of sports and physical activities. Those in Santiago and colleagues' study failed the physical activity portion of the test (50.8%) and the others in Tsuda and colleagues' research also scored at 59% or below in the badminton, tennis and volleyball tests ^[13, 16].

To evaluate competency in the second standard, PETE programs have implemented skills and fitness tests in their activity classes. However, only 46% of the surveyed PETE programs reported having at least one type of skills tests in their activity courses, and 80% of these programs failed to identify clear criteria and standards in the skills tests ^[17]. The program that Chen and Jacques examined was among the 46% that did implement skills tests in three of their PETE classes, but in this study the evaluation of skillfulness was combined with the content knowledge in the sports they were skills-tested on ^[15]. As a result, the 53 teacher candidates earned a 3.53 GPA on the content knowledge in sports/physical activities and skill proficiency (CKSP). Compared to the skills tests, there were more records on teacher candidates' fitness levels in the literature; however, the results were inconclusive because the five health-related fitness components were measured by different testing protocols and each protocol had a different set of standards to identify the

fitness levels^[12, 18-21]. Two extreme results that illustrated this drawback could be found in the following studies. Pulling from Jackson-Pollock's three-site skinfold test, Cooper's 12-minute run/walk, ACSM's push-up and curl-up tests, and YMCA's sit and reach test, Blackshear and colleagues reported an overall passing rate of 36.8% for male and 50.8% for female exercise science majors and physical education teacher candidates^[18]. Solely using Cooper's Fitnessgram, the teacher candidates in Petersen and colleagues research reported an 82% passing rate on all five testing items (i.e., 1-mile run, body mass index, sit and reach, curl-ups, and push-ups)^[12].

Teacher candidates' competency in standards 3-6 has been evaluated by their performance in the methods courses with the early field experience component and student-teaching semesters^[15, 22-28]. It was evident that the teacher candidates were able to plan quality lessons but had much room to improve on the delivery and class management^[22-23, 27]. In all three studies, Rovegno revealed the teacher candidates' poor performance during field experiences and emphasized the need for the development of pedagogical content knowledge (PCK)^[24-26]. More recently, Chang and colleagues examined the effect of a content knowledge workshop on two elementary teachers' PCK evaluated by their students' throwing performance, and a significantly greater distance was recorded on the experimental classes post-workshop^[29]. Building on a similar concept, the three middle school teachers who underwent a badminton-focused content knowledge workshop demonstrated more task progressions and adaptations based on student needs^[30]. These two articles indicated the importance of content knowledge and how it could improve teachers' PCK, and consequently lead to greater student performance. To quantify PCK, Chen and Jacques calculated their teacher candidates' GPAs in seven methods courses and student-teaching, which revealed a 3.55 average^[15]. Moreover, fellow scholars have developed performance-based assessment instruments such as Educational Teacher Performance Assessment (edTPA) and Preservice Teacher Competency Performance Scale^[31-32]. The former has been the most commonly used assessment tool for teacher preparation programs across the country, and the latter is a recently developed instrument designed to complement edTPA for its summative and high-stakes measures. However, after a thorough search in the selected databases (i.e., ERIC, PsycINFO and SPORTDiscus), limited quantitative findings were reported on teacher candidates' PCK, although there were studies examining their experiences in using edTPA and other performance-based assessment tools.

With regard to the first-year employment, more than half (58.1-61.0%) of the surveyed teacher candidates secured a full-time, part-time or long-term substitute physical education position^[15, 33]. Although the factors of academic performance, physical appearance, and the combination of the two were believed to have an impact on the job attainment in physical education, Chen and Jacques did not find any significant association between the two^[15, 34-35]. Specifically, the teacher candidates' CKKH, CKSP, PCK and fitness level showed no statistical significance with their first-year employment in physical education. Chen and Jacques argued that the insignificant findings might be on account of the small sample size ($N = 31$)^[15]. They suggested that having a larger sample size with more than one PETE programs may produce different yet more meaningful results. Therefore, the purpose of the study was to examine the competency of teacher candidates from two PETE programs, their first-year employment in physical education, and the association between the two.

3. Methods

Participants

The institutional review board approval was obtained at School B, which permitted the invitation to recruit participants from other universities. The inclusion criterion was physical education teacher candidates who took all of the identified classes that were used to evaluate competency in this research project. In other words, teacher candidates who had transfer hours or substitution credits were excluded. The sample included a total of 111 physical education teacher candidates who graduated between the spring of 2015 and the summer of 2021 academic years. Forty-six of the 111 teacher candidates (41.4%) were female and 65 (58.6%) were males. Forty-three of them (38.7%) were from School A located in the mid-south region of the United States, and the other 68 (61.3%) were from School B located in the southeastern region of the same country. School A consisted of 21 females (48.8%) and 22 males (51.2%), while School B comprised 25 females (36.8%) and 43 males (63.2%)

Data Collection

In accordance with Chen and Jacques, three distinct categories were identified to determine the participants' competency in CKKH, CKSP and PCK^[15]. Between the two schools, the courses that were included to evaluate competency in CKKH consisted of safety and first aid, personal, public, community and preventative health, application of fitness and wellness, kinesiology, motor

development, and exercise physiology. Moreover, two teacher-education physical activity courses were selected from School A (i.e., net/wall and target sports, striking/fielding and invasion sports) to measure competency in CKSP. Although the courses taught in School B were categorized differently (i.e., individual sports and physical activities, team sports and group activities), the sports and physical activities introduced in these courses were almost identical with the two courses taught at School A. The participants in both courses at either school were tested cognitively and physically on a variety of concepts and skills, including but not limited to basketball, soccer, pickleball, volleyball, disc golf, bowling, softball, and cricket. Thirdly, the courses used to evaluate competency in PCK included fundamentals of movement and instruction, materials and methods in teaching elementary and secondary health and physical education, classroom management, diverse learner/learning environment and student teaching. Within these courses, students were required to produce artifacts that demonstrated professional preparation according to SHAPE America's beginning physical education teacher standards^[5]. Examples of these artifacts were unit and lesson plans, skill and concept assessments and rubrics, and post-lesson reflections.

Finally, the information regarding participants' first-year employment was obtained via alumni pages, emails and phone calls. With the assistance from the alumni centers at both schools, the researchers were able to identify whether or not the participants accepted a full-time physical education teaching position at a P-12 school as their first-year employment. For the participants whose employment status was unavailable on the alumni pages or through direct contacts, the researchers obtained their email addresses from the alumni centers and sent two separate emails with two weeks in between. Two weeks after the second email was sent, one follow-up phone call (also retrieved from the alumni centers) was made to those who did not respond to the emails.

Data Analysis

To quantify the participants' competency, GPAs in the scale of A = 4, B = 3, C = 2, and D = 1 were calculated for the CKKH, CKSP and PCK categories, respectively. As for their first-year employment as full-time physical education teachers, it was recorded as "yes" or "no", and later converted as "1" or "0" in SPSS, respectively. Descriptive statistics were conducted to calculate the means, standard deviations, maximums, and minimums of the GPAs in CKKH, CKSP and PCK as an overall sample, and by gender and school. Independent-samples *t* tests were run to detect any significant differences on the GPAs

by gender and school. Frequencies and percentages were also calculated on the first-year employment in physical education as the overall sample, and by gender and school. Lastly, multiple logistic regressions, as an overall sample and by gender and school, were computed to determine if the participants' competency in CKKH, CKSP, and PCK had any significant influence on their first-year employment as full-time physical education teachers.

The data were determined to be both reliable and valid in terms of how they were collected and analyzed between the two schools. In this comparison study, the researchers attempted to establish a relationship between variables both independently at each school and among both schools combined. When measuring the relationship between variables, a correlation design is appropriate^[36]. The process to extract participants' GPAs for each competency area at both schools was replicable and consistent, and therefore reliable. The current study was also determined to have criterion validity (also inclusive of predictive validity) because the researchers attempted to correlate criterion-based GPA standards for each of the competency areas with first-year job obtainment in physical education. This study measured what it purports to measure with consistency between the two schools, and the instruments used to collect and analyze the data measured exactly what was intended.

4. Results

As a group, the participants earned the highest GPA in PCK ($m = 3.63$), followed by CKSP ($m = 3.61$) and CKKH ($m = 3.26$). Separating the data by gender, the female participants also upheld the highest GPA in PCK ($m = 3.76$), followed by CKSP ($m = 3.65$) and CKKH ($m = 3.37$). The male participants, however, had the highest GPA in CKSP ($m = 3.58$), PCK in the middle ($m = 3.54$) and the lowest in CKKH ($m = 3.19$). By comparison, the female participants earned higher GPAs in all three competency areas than their male counterparts, but independent-samples *t* tests only detected a significant difference in PCK ($t(109) = -3.983, p = .003$). Moreover, the participants at School A reported the highest GPA in CKSP ($m = 3.79$), followed by PCK ($m = 3.73$) and CKKH ($m = 3.53$), while those at School B averaged the highest in PCK ($m = 3.57$), the second in CKSP ($m = 3.49$) and the lowest in CKKH ($m = 3.09$). The participants at School A performed better than their peers at School B in all three competency areas, but statistical significances were only shown in CKSP ($t(109) = 3.203, p = .008$) and PCK ($t(109) = 2.710, p = .022$). The standard deviations and ranges of the GPAs as a sample and by gender and school are illustrated in Table 1.

Table 1 Summary of Means, Standard Deviations, Maximums, and Minimums for GPAs in CKKH, CKSP, and PCK

Variable	Sample (N = 111)			All Females (n = 46)			All Males (n = 65)			School A (n = 43)			School B (n = 68)		
	m	s.d.	range	m	s.d.	range	m	s.d.	range	m	s.d.	range	m	s.d.	range
GPA in CKKH	3.26	0.45	2.00-4.00	3.37	0.41	2.59-4.00	3.19	0.47	2.00-4.00	3.53	0.34	2.69-4.00	3.09	0.43	2.00-4.00
GPA in CKSP	3.61	0.50	2.00-4.00	3.65	0.46	2.50-4.00	3.58	0.52	2.00-4.00	3.79	0.37	2.50-4.00	3.49	0.54	2.00-4.00
GPA in PCK	3.63	0.31	2.69-4.00	3.76	0.23	2.89-4.00	3.54	0.32	2.69-4.00	3.73	0.26	2.89-4.00	3.57	0.32	2.69-4.00

Note. *m* = mean; *s.d.* = standard deviation.

The overall sample regarding the first-year employment revealed that a little more than half of the participants (55.9%) secured a full-time teaching job in physical education. Sorting the data by gender, two-thirds of the female participants (67.4%) obtained a physical education employment while the job attainment in physical education appeared to be more even amongst the male participants (47.7%). Additionally, there was an overwhelming amount of the participants at School A who obtained a physical education position, and on the contrary, only one-third of the participants at school B secured a teaching job in physical education. The frequencies and percentages of the participants' job attainment as a sample and by gender and school are illustrated in Table 2.

Table 2 Summary of Job Attainment in Physical Education

	Yes	No
Sample (N = 111)	62 (55.9%)	49 (44.1%)
Gender		
Female (n = 46)	31 (67.4%)	15 (32.6%)
Male (n = 65)	31 (47.7%)	34 (52.3%)
School		
School A (n = 43)	36 (83.7%)	7 (16.3%)
School B (n = 68)	26 (38.2%)	42 (61.8%)

A multiple logistic regression calculating the relationship between the participants' competency and first-year employment indicated statistical significance in CKKH (Wald = 7.964, *p* = .005), but not in CKSP (Wald = .424, *p* = .515) or in PCK (Wald = .890, *p* = .346). Two more multiple logistic regressions were also performed to discover if any significant association existed between competency and job attainment by gender and school. None of the variables showed statistical significance except for the female participants' CKKH (Wald = 7.299, *p* = .007).

5. Discussion

As a group, the ranking in the three competency areas was consistent with what Chen and Jacques found in

their study, and as a matter of fact, the participants in the present study earned higher scores in all three GPAs than those in the previous study^[15]. Furthermore, the male participants appeared to be most competent in the sport-related knowledge and skills while the female participants excelled in their pedagogical knowledge and skills. The same trend was observed as the participants at School A earned the highest GPA in CKSP and those at School B had the highest GPA in PCK. The participants' Kinesiology-related content and foundational knowledge stayed as the least competent area regardless of the grouping mechanism. Per Chen and Jacques's argument, applicable comparisons between current findings and previous research remained unknown^[15]. Specifically, fellow scholars used written tests to evaluate their participants' CKKH while this study calculated the GPA from a collection of Kinesiology subdisciplinary courses^[6-14]. In terms of the competency in CKSP, there was limited evidence in the literature except for the 46% of the PETE programs that reported having some sort of skills tests in their activity courses; however, without clear criteria and standards in the skills tests, it was difficult to produce credible results^[17]. Lastly, it is clear that no comparison could be made in the participants' competency in PCK between this study and previous research because the latter was all qualitative studies^[22-28].

By comparison, the sample's job attainment in physical education was a little lower than the previous research; however, when the data were split by gender and school, the female participants and those at School A reported much higher successful rates of getting a full-time teaching position in physical education^[15, 33]. Two surprising findings from the multiple logistic regressions indicated that the samples and the female participants' competency in CKKH had a significant influence on their first-year employment as full-time physical education teachers, which was contrary to what Chen and Jacques found in their study^[15]. This interesting result could be a result of the bigger sample size in the present study;

however, a conclusion should not be drawn without follow-up studies containing much bigger sample sizes.

Three implications could be drawn from this study. First, it was concerning to learn that the participants were the least competent in the content and foundational knowledge of Kinesiology. The CKKH is the first and foremost expectation in SHAPE America's national standards for initial PETE programs^[5]. Without the competency to "demonstrate an understanding of common and specialized content, and scientific and theoretical foundations"^[5], teacher candidates would have a very difficult time planning and delivering effective physical education lessons. Besides, recent research has claimed that undergoing a content knowledge workshop led to a greater level of PCK and had a consequential effect on improved student performance^[29-30]. These findings echoed the importance of content knowledge and how it is the essential component of planning and delivering quality lessons regardless of a teacher's experience in the profession (i.e., teacher candidates, beginning teachers, seasoned teachers).

Secondly, this study demonstrated further evidence of the importance of content knowledge by confirming a statistical significance between CKKH competency and the (female) participants' ability to secure a physical education teaching position. Given the participants' lack of competency in CKKH and that it was an influencing factor to obtain a full-time teaching job, it seems reasonable to encourage PETE faculty and their colleagues to help their teacher candidates develop better foundations of content knowledge in Kinesiology-related courses using evidence-based teaching strategies.

Lastly, it was noticeable that the female participants and the participants at School A had really good chance getting a physical education teaching job. The researchers could not help wondering what happened during the same time period that made such a clear difference between gender and location of the institution. Further examination on the reasons why these two groups of participants produced a higher percentage of job attainment in physical education could help PETE program better equip their students while they are still completing their degrees, and also help them be more marketable during the job hunt.

6. Conclusions

This study has a few limitations. The first was the small sample size. Collecting data from two PETE programs indeed helped increase the sample size, but with curriculum changes and courses with a pass/fail grade, a considerable amount of teacher candidates' data had to be excluded from the dataset. Secondly, the courses that

were included and later calculated for the GPA may not be the best representation of Kinesiology subdisciplines. In order to keep the consistency between the two schools, some courses were dropped from the dataset because one of the schools did not offer them. Biomechanics and sport psychology, for instance, were excluded because one of the schools did not offer them, but they were considered two of the major subdisciplines in Kinesiology. Additionally, the researchers had no control over how the participants earned their grades in the courses. Although the course objectives in the same course offered at both schools were checked to ensure comparability, different instructors used different grading items and assessment tools to evaluate student learning, which presented a threat to the internal validity. The researchers attempted to eliminate this threat by excluding the teacher candidates who had transfer hours from another institution or substitution credits from another class, but it could still be an influencing factor in terms of quantifying the participants' competency in the three areas at either school. A third concern regarding the courses was that some participants might have taken the same course more than once because they failed it or did not make a C or better grade for the core courses on the first attempt. In this case, the final grade on the transcript did not demonstrate the participants' true performance.

The third limitation was related to the first-year employment. Following Chen and Jacques' recommendation, the researcher intentionally asked the participants if they took a full-time physical education position during the year after they completed their undergraduate degree in PETE^[15]. Those who reported teaching physical education classes and another subject at the school or teaching in the classroom while obtaining a coaching position were not considered the same as full-time physical education teachers although they may be labeled as physical educators. Moreover, some participants were offered a full-time physical education position but had to turn down for reasons that were not disclosed in this research. For these participants, they obviously were competent enough to secure a physical education teaching position at a P-12 school, but they were considered one of the participants who did not obtain a job in that regard. Additional discussion about this limitation was how the definition of "first-year" after graduation was determined. For typical teacher candidates who received their diplomas in the spring or summer commencement, the next academic year was their "first-year", starting in August and ending in May. However, for teacher candidates who completed their degrees and walked in the fall or winter, they may consider the rest of the academic year as their first year or they may disregard the

remaining academic year and consider the next academic year as their first year. Either way, it might create a mixed interpretation when asked whether or not they obtained a teaching position as their “first-year” employment. Fellow-researchers who are interested in carrying out a follow-up study may want to define a concrete timeline to define this term.

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REVIEW

An Analysis of the Pre-writing Strategies Employed by Chinese College Students in the Timed Examination

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ABSTRACT

This thesis is trying to analyze the pre-writing strategies used by Chinese college students in a timed examination. The purposes of this study is to identify the possible strategies the Chinese college students claimed they used in the pre-writing stage of the timed examination, find if differences exist between the pre-writing strategies employed by skilled writers and unskilled writers, and find which strategy best facilitate writing in a timed condition.

1. Introduction

Writing has been searched for many years. Many researchers have given clear definition of writing. From the study of Hedge (2000:302),^[10] “writing is the result of employing strategies to manage the composing process, which is one of gradually developing a text”. This reveals that writing involves different mental operating process, which is very close to the explanation: writing is an expression of what one thinks, and the success of writing closely connects effective thinking. Various strategies are employed in the writing process.

The focus of this thesis is on the pre-writing strategies of Chinese college students before they start composing

in timed condition. The pre-writing strategies of high and low achievers will be compared. This analysis is of great values for college teachers, so they can use more effective pre-writing strategy.

In fact, the strategies students with high writing achievement have used differ from that of low-achievement students in brainstorming ideas and texts, revising and editing (Chien 2007).^[2] Certain previous literature has shown that there are some differences between the pre-writing strategies employed by effective and less effective writers. This thesis made efforts to find out whether the differences still exist in the timed examination. This can help students to select effective strategies to facilitate the writing in timed condition.

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1.1 The Value of This Research

Writing is a complex process. As a matter of fact, many students are not aware of the importance of writing when studying foreign language (FL). Writing is language practice as a support for other skills learning, to communicate about the FL culture, or to learn about composing (Reichelt 1999&2001).^{[15][16]} This is why students have a low level of motivation to develop their writing. According to Wolff (2000: 11),^[23] writing in a foreign language is defined as the “most efficient L2 learning tool we have.”^[6] Writing is usually divided into three stages according to the process approach: pre-writing, during-writing and post-writing. In addition, based on the study of Flower and Hayes (1980),^[8] composing is categorized as three cognitive processes or strategies: planning, translating, and reviewing. This reveals that during the pre-writing stage, planning is utilized. Different students write in different way and their planning before writing is also different.

Studying the pre-writing strategies employed by Chinese college students in a timed examination, also allows us to study whether a relationship exists between the pre-writing strategies used by skilled writers and unskilled writers in timed condition. In fact, many study shows that strategy used in the pre-writing stage can foster the writing process in some degree. In China year ago, due to large class sizes and limited writing classes, students spent less time on writing inside class. However, currently, Chinese Ministry of Education published “Teaching Requirements for College English Curriculum” in 2004. The requirements put great emphasis on college students’ writing development. Nevertheless, in Chien’s (2012)^[3] case study, she studied the relationship between writing strategy/planning and writer’s achievements.^[8] Her studies gave the clues that there were some differences between the pre-writing strategies used by high achievers and low achievers. In the experiment, it shows that high achievers tend to make less planning efforts during their composing process.

2. The Introduction of Pre-writing

2.1 The Concepts of Pre-writing Strategy

As previously mentioned, writing is usually divided into three stages according to the process approach: pre-writing, during-writing and post-writing and composing is categorized as three cognitive processes or strategies: planning, translating, and reviewing (Flower & Hayes, 1981).^[7] Planning occurs during the pre-writing stage, and so pre-writing may be the most crucial stage when

composing (Wing, 2009).^[22] Rohman (1965)^[17] claimed that pre-writing referred to the discovery stage in the composing process in which the writer made his “subject” similar with himself. He raised the question, what kind of thinking fosters writing, when defining the principle of pre-writing. In his article, he defined thinking as the activity in the mind which created ideas, plans and designs, which is active and persuasive logical thinking. This thinking comes from experience and is defined as a set of cognitive operations by many researchers. However, this kind of thinking is not assumed to happen only before the writing process. It is true that this thinking still occurs during the writing process. Besides, Hedge (2000)^[10] stated that if teachers wanted to help students produce and promote the composing outcome, then teachers should be clear that how writing is produced.^[1] She also claims that a series of complex cognitive operations are needed when preparing to write. This cognitive operation occurs throughout the whole writing process, including Pre-writing, drafting and revising.

As the basic and primary stage, pre-writing accordingly needs to be researched and studied. Rohman (1965)^[17] claims that pre-writing is before composition where every idea is ready to write, and he also states the reason why he puts focus on pre-writing: ‘it is crucial to the success of any writing that occurs later and it is seldom given the attention it consequently deserves’ In essence, the pre-writing process is a crucial phase in the composing process. Students employ multiple strategies consciously and unconsciously in preparation before they start composing. According to Flower and Hayes (1981)^[7], Hayes (1996)^[9], and Hayes and Flower (1980)^[8] pre-writing strategies or planning is sub divided into brainstorming or generating ideas and organizing the text and setting up goals. Students utilize these strategies in different ways; however, not all of them use these strategies in an appropriate way. Some research has found that the pre-writing strategies that high achievers used are different from those of low achievers. Chien (2007)^[2] also states that the strategies students with high writing achievement have used differ from those of low-achievement students in brainstorming ideas and texts, revising and editing. The authors of this study have made the assumption that the differences in the pre-writing strategies used by skilled writers and unskilled writers in timed condition is of value for college students’ writing development.

2.2 The Techniques Employed in the Pre-writing

It is widely accepted that pre-writing techniques can be categorized into clustering, brainstorming, free-writing,

note taking and reasoning and questioning. However, in Sasaki's study, he clearly defined the pre-writing techniques into the following categories.

Table 1 (Sasaki 2000:290)^[18]

Technique	Definition
Global planning	detailed planning of the overall organization
Thematic planning	less detailed planning of the overall organization
Local planning	planning what to write next
Organizing	organizing generated ideas
Generating ideas	naturally generated & descriptive generated
Reasoning & Questioning	journalist's questions
Translating	Translating generated ideas into L2

However, this table cannot show the techniques students used in a timed condition. There are very few studies concerning the pre-writing strategies used in the timed condition, which is the thesis of this study.

2.3 Pre-writing Strategy Employed by Chinese College Students

In China, many factors contribute to students' low composing competence, the great number of students; the incoherence between the classroom instruction and the College English Test (CET); students' purpose for test; and teacher's low proficiency in teaching writing (You 2004).^[24] From the perspective of teachers, for a long time, teachers paid much attention to the production of writing rather than the composing process. Pre-writing strategies have been paid less attention. From the perspective of students, it is a fact that EFL writing is the toughest part for Chinese college students as indicated by their low writing examination scores, like The International English Language Testing system (IELTS). Many students feel a blank in their minds when they are given an essay to compose, especially when they are not familiar with the topic. It usually takes a long time for students to start writing. This, to some extent, reveals that Chinese students do not do so well in the pre-writing part. This thesis will give an overview of what kind of strategies Chinese college students claim they have employed before their writing in the timed condition, and there will be analysis through comparing the pre-writing strategies used by the higher and lower achievers in the timed examination. This can help to find out which pre-writing strategy can have a greater influence on college writing achievements in the timed examination.

2.4 Related Studies of the More-and Less-Skilled Writers' Pre-writing stage

2.4.1 An Overview of Related Studies

As previously mentioned the authors' assumption is that skilled writers can be distinguished from less-skilled writers on the basis of their effectiveness in the pre-writing stage. Action here refers to the "cognitions or other behaviors" that are employed to achieve some certain writing goals (Flavell 1979).^[6] This assumption is of great values, because if true help clarify writing development. Statistics from some study reveals that the strategies effective writers have employed in the whole writing process is distinctively different from the novices. In the following part, there is the description from others' findings about the strategies employed by effective writers and the novices.

Based on the study of Hayes and Flower (1981)^[8] and Hayes (1996)^[9], different strategies were used in different stages in the English writing process. Moreover, writers employ different strategies at the three writing stages. Many studies have stated that even for the native, the strategies employed by more skilled writers uses differ from that of the less skilled writers (Bridwell 1980^[1], Stallard 1974^[19], Wall & Petrovsky 1981).^[21] Besides, studies from others also show that different EFL writers compose in different ways by using different strategies during the writing process (Raimes 1985^[14], Zamel 1983^[26]). This is mainly due to that different people think in different ways, preserve different world knowledge, and have different level of learning strategies. Based on the definition of metacognition from Flavell (1979)^[6], metacognitive strategies and metacognitive knowledge have different degree of influence on the planning.

2.4.2 The Comparison between Effective Writers and Less Effective Writers

As for the skilled writers, Zamel (1982)^[25] showed that skilled EFL writers experienced the process of creating meaning from self-reports and the written work of the participants in her study. These writers think about the ideas or thoughts by stimulating their knowledge memory and then recorded these thoughts on the paper. This means good writers can elicit their related previous knowledge to the utmost to help their following writing. In fact, these skilled writers can put their ideas on the paper with the most appropriate form which can best express their opinions. Besides, it is important to recognize the fact that good writers are more flexible. This means they are more likely to make changes to their composition and start

another one when necessary. This can also be identified from the study of Zamel (1983),^[26] which claimed that skilled writers were able to rework their essay over the time consistently if they had access to other's work as the reference. This shows that professional writers' planning stage is not fixed, but flexible. They are more likely to change their original plan if a new idea comes to their mind. Zamel's finding shows that skilled writers compose with more focus on meeting the requirements of the thesis statement than the linguistic background. Zamel's finding also can be found from the study of Pianko (1979)^[13], Raimes (1985)^[14], Sommers (1980)^[20], and Stallard (1974)^[19], they stated that skilled writers tend to be more flexible, and this is extremely obvious in the planning stage. This is also very similar with the finding of Matsumoto (1995)^[12]. Based on the interviews with several professors about their composing strategies, effective writers were always ready to change their original plan once they begin to write. In contrast, it needs to be noted that the professors are expert writers rather than skilled writers. Expert EFL writers are defined as the writers who preserve the professional work and often write research papers in English (Sasaki 2000)^[18]. On contrast, some studies show that the less-skilled writers seem to be more fixed, and they seldom change their original plan when they compose. They adhere to the original plan and continue the writing without changes. This also can be found in the finding of Matsumoto (1995),^[12] who supposed that the novices start their writing quickly with less time on planning^[24]. In most cases, they followed the original outline or planning without the changes during their composing process.

However, few studies have shown whether this finding stays true if the writing is in a timed condition. In a timed examination, it is obvious that writers have limited time for the whole writing. For example, there are only 60 minutes for the writing part and only 40 minutes for the task two writing. It seems that writers have less time to make changes during the pre-writing stage than their outside school writing. It is of great academic values to study the flexibility of the planning in a timed condition. In this thesis, there will be a deep looking into the timed condition of whether skilled and unskilled writers' planning is flexible or fixed.

Besides, the interviews from Matsumoto are of great importance to the study what high skilled writers do before their writing. The participants in the interviews who are professors in the college described that they first, decided who they are writing for before their starting and have the audience in mind consciously (1995)^[12]. That is, the professors have their targeted audience in their mind,

which serves as the first step of their planning stage. This means skilled writers are clear who their audience is and they focus on achieving the goal for the targeted audience, like writing down appropriate title. This can help writers prepare the goal setting. In addition to this, for the skilled writers, their first concern is the explication and articulation of their ideas and opinions. They focus more on the whole content meaning. This also can be found in Matsumoto's finding, which showed that proficient writers firstly emphasized the general content of the writing, other than the detailed structure, "dealing with larger chunks of discourse without minor formal aspects and delay editing at the end of the process" (1995)^[12]. Sasaki (2000)^[18] also explained skilled writers differ significantly from unskilled writers in the overall organization. However, unskilled writers start writing with less planning and continually edit the previous writing when they are composing. This also can be found in the study of Cumming (1989)^[4], Raimes (1985)^[14] and Zamel (1982&1983)^{[25][26]} who stated that unskilled EFL writers made fewer efforts and more efforts to revise the writing at the word and phrase level. Unskilled writers spend more time on editing the previous writing because they do not make a well-rounded plan at the pre-writing stage. They have not prepared an outline of essay before they start writing and are not clear about the organization of their thoughts. Therefore, they are not confident in what they have written, and do not have an effective outline in their mind to help them compose an organized composition. Moreover, unskilled writers are more likely to spend the most time on the word or phrase level. There are still many other findings which are very similar with that of Matsumoto. Cumming (1989)^[4], Raimes (1985)^[14] and Zamel (1983)^[26] claimed that skilled writers tend to pay more attention to planning and revisions at discourse level. However, unskilled writer are intended to focus less on the planning stage (Murphy & Manchon 1999^[11], Zamel 1983^[26]). This reveals that skilled writers tend to spend more time on planning the content and organization of the composition. However, unskilled writers are more likely to spend less time on the planning stage. However, in a timed examination, due to the time limitation, further study is needed to verify that skilled writers spend more time on planning than that of unskilled writers.

As for generating ideas, based on the interviews with the professors about the writing experience, all the professors in Matsumoto's (1995)^[12] study utilized the word processing during the planning stage.^[24] When the professors were preparing for generating ideas, they wrote down everything that came to their mind that related to the topic. This does not mean that the professors spend

much time on the word and phrase level in the pre-writing stage. It should be noted that the words they write down are the ones which closed related to the topic or theme. This can help them create a practical mind map to produce more ideas and select the appropriate ones. This also can help them to summarize their thinking and cluster their ideas. However, unskilled writers often encounter the problem that they cannot generate ideas effectively and efficiently. At the pre-writing or planning stage, they are slow to stimulate ideas from their previous knowledge. They cannot create practical mind map in the planning stage. In a timed condition, it is especially important to create effective ideas in the pre-writing stage to be well prepare for the following writing. However, in the timed examination, the difference of generating ideas in the pre-writing stage by skilled writers and unskilled writers is less studied and more studies are needed on whether the skilled and unskilled writers use the same pre-writing strategies.

As for generating ideas, it should be noted that effective writers differ from less effective writers in generating ideas to factors other than differing strategies. Another important factor which influences generating ideas is metacognitive knowledge. In the previous part, there is a general view of the construct of metacognition. According to Flavell (1979),^[6] metacognition is categorized into metacognitive knowledge and metacognitive strategies. The metacognitive knowledge has influence on the strategies of generating ideas. In the timed condition, metacognition is an extremely important factor that governs a writers thinking when planning to write.

The many research studies comparing the writing strategies employed by skilled and unskilled writers, like the studies of Bridwell (1980),^[1] Faigley and Witte (1981),^[5] Pianko (1979),^[13] Raimes(1985)^[14] and Stallard (1974)^[19] all show there are differences in the writing strategies utilized by skilled and unskilled writers. However, these studies mainly focus on composing process and revising process. Limited researches has studied the pre-writing strategies, especially in the timed condition. The study of the pre-writing strategies can make a contribution to the writing development, especially if the pre-writing strategies of effective writers and less effective writers compared. Any further studies on pre-writing strategies should also focus on timed condition writing to further enhance the writing advancement. Especially, the writing performance of the Chinese college students is far out of satisfactory. It seems more urgent to continue the study of pre-writing strategies. Therefore, these efforts to study the pre-writing strategies in the timed condition is needed to support future Chinese college students.

3. Discussion

The types of pre-writing strategies Chinese college students claimed they employed in the timed condition can be clustered into thematic strategies, generating ideas, organizing generated ideas, and reasoning. It should be noted that these strategies were widely used by the majority of the college students, but not all college students. There were some differences between the strategies used by skilled and unskilled writers in timed condition and the finding in this thesis were similar with the studies of Chien (2012),^[3] who claimed that skilled writers made fewer efforts on the planning.^[3] The main difference between them was that skilled writer made more efforts on the global organization since they focused more on the content and meaning organization throughout the three sub stages of the planning. When using these studies to compare the strategies used by Chinese college students on a timed writing, the detailed planning of the general organization and what to write next seems to be less popular. In timed condition, skilled writers also employ detailed organization of the content and meaning level to prepare in the planning stage; even though, these cognitive actions happen in a short time. This is the main finding in the data, and this obvious difference between skilled and unskilled writers also reveals that the detailed organization of the content and meaning level tends to be more important in the writing achievement in timed condition.

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ARTICLE

Higher Diploma Program in Eitiopian Higher Education: Instructors' Perception and Perceived Practices in Jimma University and Jimma College of Teachers Education

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ABSTRACT

The study investigates the perception and perceived practices of Higher Diploma program (HDP) in the Jimma University and Jimma College of teachers' education using a cross-sectional survey design comprised of questionnaire and interviews. The data were collected from 91 instructors, and 3 higher diploma leaders (HDLs) who were selected through lottery sampling and 2 higher diploma coordinators (HDCs) who were selected using availability sampling methods. The finding revealed the importance of the HDP (M=4.3, SD=0.91) though the perception of the HEI instructors differ before coming, and after coming to the HDP. Though the study indicated as the trained instructors are applying the knowledge and skill, which they have acquired from the HDP training, the HEIs are not following the actual practices of the training. The study found out that the HE instructors' perception had a significant correlation with the practices of HDP ($r=.694$, $p=0.00<0.01$) having a moderate effect size ($\delta=0.48$). The findings call for the proper implementation of the HDP for the betterment of the program and to achieve the intentions of the HDP.

1. Introduction

Teaching profession is one of the essential professions through which all other professions are made possible. It is therefore of vital importance what teachers know and can do (Genet et al., 2013).^[18] In this sense, the task of preparing and supporting the in-service development of teachers' knowledge, attitudes and skills for the professional development of teachers are a very important issue (Walsh & Gamage, 2003;^[33] Villegas-Reimers, 2003).^[32] As we know professional development (PD) is a complex process that requires the cognitive and emotional involvement of teachers individually and collectively, the ability

and willingness to examine where each individual stands to beliefs, and the review and implementation of suitable alternatives for improvement or change (Avalos, 2011).^[7] It is sustainable, intense, and content-oriented to have a positive and lasting impact on teaching, and teacher performance. It improves and increases teachers' knowledge of the subjects they teach and practice, and improves students learning outcomes (Darling-Hammond et al., 2017).^[12]

As a result, the Ethiopian Ministry of Education (MOE, 2011)^[25] paid more attention to provide high-quality education at all levels. Among the proposed quality indicators, the availability of qualified teachers influences the

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quality of education (MOE, 2011).^[25] To do so, the Ethiopian MOE designed the higher diploma program (HDP) for higher education institutions (HEIs) in 2002 (MOE, 2003)^[27] to improve and upgrade the quality of teachers through in-service training. The intention was to improve the quality of the higher education instructors and, ultimately to improve the achievement of students.

The HDP is continually evolving in line with government policies and strategies to support teacher educators qualified with a minimum standard of Bachelor of Arts' (BA) and Bachelor of Science (BSc) degrees (Abdissa, 2017).^[2] The program focuses on developing the skill and professionalism of teacher educators of higher institution who can produce skilled work forces with the intentions of improving the quality of education in Ethiopia through a licensing program (Mengistu, 2017)^[22] aimed at creating a reflective teacher who can use active learning, and student centered teaching methods (Monroe, Kumar & Aklilu, n.d; ^[28] MOE, 2003)^[27]. It provides teacher educators with a practical program to support their development as effective teachers and reflective practitioners with enhanced professional status, able to model continuous assessment and active learning, manage change and make a difference in the education system (MOE, 2018)^[24]. The Program gives room for discussing and reflecting on recent significant changes in the teaching-learning processes of higher education. The significant expansion of tertiary education has also led to the need for more trained teacher educators to ensure quality and meet sector objectives and meet demand for the HDP (MOE, 2011).^[25] As college teacher educators, they themselves need to be of high quality to be competent and trained for the specifics of their role in order to produce better teachers and improve student learning (Abdissa, 2017).^[2]

The HDP is one of the in-service teachers training designed for the HE educators to support and equip them with the necessary skills and knowledge of teaching which is required in the 21st century, which is different from the BA, BSC or PhD degrees. The training is given by the higher education educators who have master's degree or Doctoral degree in education (specialized with Curriculum and Instruction) and, certified with the HDP after they receive their Master's degree or Doctoral degree. It takes one year duration. Now a day innovative teaching practices are required to develop student competencies such as deep mastery of challenging content, critical thinking, complex problem solving, effective communication, collaboration, and self-direction (Darling-Hammond et al., 2017).^[12] Therefore, HE educators should update their skill, knowledge and attitude by engaging in such (HDP) professional training programs (MOE, 2003)^[27].

As stated in the Second Growth and Transformation Plan (GTP II) of the Federal Democratic Republic of Ethiopia (FDRE), one of the main objectives of the Education Sector Development Plan (ESDP) was to ensure quality education (FDRE, 2015).^[16] Quality education require quality instruction that use a certain kind of pedagogical techniques such as teaching methodology, assessment skill, classroom management, skill of conducting an action research, etc. The use of educational techniques also includes the effective design of curricula, and course content, a variety of learning contexts, use of feedback, and the effective assessment of learning outcomes (Henard & Roseveare, 2012;^[19] Ashenafi, 2017).^[5] Due to the fact that the MOE paid due attention to pedagogical methods in the teaching-learning competence of university instructors and included the HDP in teacher education system overhaul (TESO) in 2003. TESO is an extensive study conducted by the Ministry of Education (MOE) in 2002 covering the overall education system of Ethiopia and teacher's education system in particular (MOE, 2003).^[27] The TESO study revealed that Ethiopian teachers educators failed to form a spearhead in the educational development endeavor (Adula, 2008).^[3] Therefore, the MOE designed the HDP with the intention of improving the teaching practice of the staff, which in turn results in the provision of high quality education to students (MOE, 2018).^[24] This is in line with the goals of the university program, which trains knowledgeable, qualified graduates who are ready for employment in a needs-based, proportional balance of subjects and disciplines for international competitiveness (FDRE, Higher Education Proclamation /2019).^[15]

The university instructors were very weak in applying the training from the HDP and it was poorly practiced in their actual teaching. Supporting this the MOE (2005)^[26] in its Education Sector Development Program (ESDP) III reported that teachers do not constantly update their competences and skills. From this we can understand that with the pre-service training it is impossible to cope with the changing and dynamic environment without constantly updating ourselves. In Ethiopia, one way of updating ourselves in the HE is through participating in the HDP training.

Though the skills acquired through the HDP training were not fully practiced (Adula, 2008)^[3] in the teaching-learning process, a significant number of university instructors have positive perception for HDP training (Zelalem, 2017;^[35] Abdissa, 2017).^[2] A study conducted by Mengistu (2017)^[22] at Ambo University showed that those who were certified in HDP implement predominantly modern student-centered pedagogy, while teachers who were not certified in HDP used predominantly conventional teacher-centered methods

(Jula and Shielis, 2018).^[20] On the contrary, the study of Adula (2008),^[3] indicated that the HDP graduates did not apply the competencies set in the HDP curriculum to the expected level. The study of Yilfashewa (2016)^[34] also showed that many lecturers in the Ethiopian HE did not have the curiosity to participate in the highly relevant university PD programs such as HDP.

The above studies did not address questions related to the perception and perceived practices of the HDP in depth. For example, Abayneh, et al. (2019)^[1] focus on the implementation of HDP, Adula (2008)^[3] focuses on the application of HDP training skills in the classroom, Abdissa (2017),^[2] Robsan (2020)^[30] as well as Mengistu (2017)^[22] focus on the role of HDP. On the other hand, Atnafu (2020)^[6] focuses on assessing the impact of HDP training on the teaching-learning process, Bekalu (2006)^[8] focuses on reflections on HDP, Bekalu (2009)^[9] focuses on teacher PD in Ethiopia through HDP and Jula and Shimelis (2018)^[20] focus on assessing the effects of HDP.

None of them paid detailed attention to the perception and perceived practices of HDP. To the knowledge of the researchers, very few things have been said about the perception and perceived practices of HDP in the HE of Ethiopia. In addition, assessing the perception and perceived practices of HDP is of paramount importance in order to improve the implementation of the HDP for the better because ones perception towards HDP will lead to the proper implementation of the HDP. For example, as the finding of Dos Santos, (2019)^[13] indicated teachers' beliefs about teaching strategies and methodologies about teaching and learning impacts their classroom management, curriculum and instruction planning. Learning in any teaching is influenced by different factors or elements. These elements include teachers' beliefs, teachers' professional development through training, as well as their teaching and learning style (Dos Santos, 2018).^[14] As a result, the information generated through this study can give some insight on the perception and perceived practices of HDP. Therefore, this study will attempt to fill this gap in the literature guided by the following research questions.

1. To what extent do instructors perceive the importance of HDP?
2. How do instructors perceive the actual practice of the HDP training?-
3. Do the HDP trained instructors' perceptions of the importance and actual practices of the HDP differ across colleges, departments, ages, educational levels, academic rank, and teaching experiences?
4. Do the perceptions of the HE instructors have some relationship with the perceived practices of the HDP?

2. Material and Methods

2.1 Research Design and Methods

A cross-sectional survey design was used to examine the perception and perceived practices of HDP in Ethiopian Higher education (JU, and JCTE) in the year 2021. This study collected quantitative (a questionnaire) and qualitative (open-ended questions and interviews) data. The study adapted the questionnaire developed by Monroe, Kumar and Aklilu (n.d.)^[28] and Robsan (2020)^[30] to measure teachers' attitudes towards the importance of HDP and the practices of HDP, respectively. In addition, the suitability of the instrument was checked using pilot test to check the consistency of the questionnaire to apply in the study area and being used with some improvements in order to answer the research questions. Accordingly, the validity and reliability of the questionnaire were checked and found that convincing to conduct the study. The reliability check was found satisfactory, having the alpha level of 0.86, and 0.87 for the perception and perceived practices of HDP, respectively. The study used questionnaire to collect data from 91 instructors and interview for 5 participants (2 HDP Coordinators and 3 HDP leaders). The interviewees' selected had in depth knowledge with respect to the research question.

2.2 Sampling Procedure

According to the data obtained from the two public institutions of the town of Jimma, around 898 teachers a total of 2,251 academic staff at the universities (2,187 from JU and 64 from JCTE) completed their HDP training in 2021. From the HDP trained teachers, 59 instructors were found in JU and 839 were found in JCTE. The researchers selected the study participants by using proportional sampling.

The researchers determined the sample size following Yount (Cited in Gay, 2009)^[17] sample size determination. According to him taking 100%, 10%, 5%, 3% and 1% were recommended for the populations of 0-100, 101-1000, 1001-5000, 5001-10,000 and over 10,000, respectively. Accordingly, the researchers used this suggestion and took 10% from each sampled university (84 from JU and 7 from JCTE, a total of 91 instructors) from 898 target populations who had completed the HDP training using simple random (lottery) sampling method to give them equal chance of being selected. Table 1 summarizes the total sample size and its distribution among the categories of participants.

The other groups of study participants were HDP leaders (tutors) and HDP coordinators. In this regard, each

institution has one HDP coordinator. With respect to the HDP leader, the JU has 12 HDP leaders, and the JCTE has one HDP leader. From this target group, the researchers took both HDP coordinators (one from each institution) and one HDP leader from JCTE with availability sampling because they were important to give data and few in number. Two HDP leaders from JU were selected with simple random (lottery) sampling since 12 of them have the equal probability of being selected from the population, which has a total of three HDP leaders. In general, 96 participants took part in the study (87 from JU and 9 from JCTE). Table 2 summarizes the data collection instruments and the sampling techniques.

2.3 Procedures of Data Collection

After making an agreement with the concerned participants, the researchers introduced the objective of the study and administered the questionnaire to the sampled instructors of the selected institutions by allowing them to give their own answers to each item independently and the data collectors closely assisted and supervised the participants based on the training obtained from the researchers. In addition, interviews were conducted in a free and calm environment to minimize communication barriers after obtaining the participants' individual consent.

2.4 Method of Data Analysis

For quantitative analysis the researchers employed both descriptive and inferential statistics and the questionnaire, which has a five-point scale was reduced to a three-point scale in order to make the process of data tabulation easi-

er. Hence, the values of the alternatives 'strongly disagree' and 'disagree' were combined together, similarly, the values of the alternatives 'agree' and 'strongly agree' were combined whereas the values of the alternative 'neutral' were treated separately. Therefore, the tabulation, analyses, and interpretations of the quantitative data were made based on the three-point scale.

The first and the second research question was analyzed using descriptive analysis. The third research question was analyzed using a one-way analysis of variance (ANOVA) and the fourth research question was analyzed using bivariate correlation. Furthermore, the quantitative data displayed first and then corroborated by the qualitative data analysis.

The data gathered through open-ended questions and interview was analyzed qualitatively through thematic analysis in the form of texts and quotes for the purpose of triangulation.

2.5 Ethical Considerations

The researchers took into account the voluntary and informed consent before administering the questionnaires and conducting interviews. Confidentiality and anonymity were ensured throughout the execution of the study to obtain reliable information from the participants on the questionnaire and interview. Codes were given for the participants of the interviewee to make the analysis easier and to keep the confidentiality of the participants' information and ethical clearance was received from the research ethical review and publication committee of Jimma University.

Table 1: Sample Size and its Distribution

No	Sampled Schools	HDP trained Instructors		HDP coordinators		HDP Leaders		Total sample size	
		Popn	Samp	Popn	Samp	Popn	Samp	Popn	Sampl
1	Jimma University	839	84	1	1	12	2	839	87
2	Jimma College of Teachers Education	59	7	1	1	1	1	59	9
	Total	898	91	2	2	12	3	898	96

Table 2: The Data Collection Instruments and the Sampling Techniques

No.	Respondents	Method of sampling	Instruments		Total
			Questionnaire	Interview	
1	Participants of HEIs	Quota sampling	-	-	-
2	Instructors	Simple random (Lottery) sampling	91	-	91
3	HDP coordinators	Availability sampling	-	2	2
4	HDP leaders	Simple random (lottery) sampling	-	3	3
1-4		Total	91	5	96

3. Results

3.1 The Higher Education Instructors' Perception on the Importance of HDP

In order to know the extent to which HE instructors' perceive the importance of HDP, HDP trained instructors were asked to forward their ideas using a questionnaire designed on a Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5). Table 3 presents the summary of the results.

As it is shown in Table 3, fourteen items were prepared for the instructors who trained HDP and the respondents of the questionnaire completely agreed with the importance of HDP having the grand mean value of 4.3 and the standard deviation of 0.91, which is similar with the findings of Zelalem (2017)^[35] and Abdissa (2017).^[2] However, as the finding of open ended analysis and interview revealed, the perception of the HE instructors' differ before starting to attend the HDP training and after starting the training. Before coming to the program majority of teachers perceive HDP as a waste of time; nevertheless, after they started the training, the perceptions of the majority of those teachers were changed because of the participatory nature of the HDP.

Data collected from interviewees' also supported the above idea. The results of the interview conducted with

the HDP coordinators and HDP leaders indicated the importance of HDP for all instructors who engaged in the teaching and learning process and interviewee HDL 2 said, "HDP training is very useful since the teacher shares experience from each other during the discussion". Especially, interviewee code 1 stated that

...My perception differs before attending and after attending the HDP. Before I came to the program I perceive HDP as wastage of time. So that I try to defend that the HDP is a meaningless program and it has nothing to do with me as personal development program or as PD program. I feel that this is non-value adding program but after I came here (to the HDP training) and start the training, my perception has been changed because of the participatory nature of this HDP. So, I am interested and developed a good attitude and perception towards this program. After ... attending three to five HDP sessions, I do not want to miss it.

In similar way, the results of the open-ended items of the respondents indicated the importance of the HDP too. For example, one of the respondents said that

I found the HDP training very interesting in changing my whole life that is to say: it made me to be reflective teacher educator, reflective writer, reflective oral writer; it made me to be motivated teacher educator who can publish four article of my own in reputable journals. In

Table 3: The HE Instructors' Perception on the Importance of HDP

N.	Questionnaire Item on HE instructors' perception of the importance of HDP	M	SD
1.	The HDP training has improved my relationship with my students.	4.35	0.99
2.	The HDP training has helped me to apply an active learning method.	4.48	0.89
3.	The HDP training has helped me to apply a student centered teaching approach	4.53	0.77
4.	The HDP training has helped me to improve my assessment skills.	4.44	0.82
5.	The HDP training has helped me to improve my action research skills.	4.18	0.94
6.	The HDP training has motivated me to seek a teaching career.	4.11	0.97
7.	The HDP training has motivated me to improve my teaching performance.	4.43	0.81
8.	The HDP training has motivated me to implement new teaching methods.	4.24	0.87
9.	The HDP observation feedback helped me to improve my teaching methods.	4.24	0.86
10.	The HDP 80% attendance requirement motivated me to be in class.	4.11	1.1
11.	HDP certification is a positive motivation for me to complete the course.	4.24	1.01
12.	The HDP training improves my awareness on the teaching and learning process	4.42	0.82
13.	I have the knowledge and skill of linking the HDP training to quality teaching and learning	4.35	0.78
14.	The HDP training is an entertaining program, which helped me to get an important lesson	4.00	1.16
1-14	Grand value for the positive items	4.3	0.91

Note. M=below 1.49-strongly disagree, M= 1.5-2.49-disagree, M= 2.5-3.49-neutral, M=3.5-4. 49 agree, M=4.5-5-strongly agree

this regard, it led me to improve my professional career to the rank of assistant professor.

The others said

HDP changed my traditional ways of teaching to reflective teacher educator who can always give information to the students to seek knowledge.

I have learned a lot from the program. When I say this, I have learned from my classmates through discussion and participating in-group activities but the way the trainers/leaders communicate the material was boring, and it is not as much expected from them.

Though most of the respondents agreed with the importance of HDP, they recommend the HDP to be applied for undergraduates and those who did not have the teaching background and did not have the pedagogical knowledge and skills. Supporting this idea, the following respondents of the open-ended item said that:

“The HDP training has a significant value for BSc students and I think better if the program focuses on BSc graduates, as well as, better if they take it before starting of their teaching.”

“I think the HDP training should be given more for those graduate of applied degree.”

“The HDP training is helpful especially for those who graduate with non-teaching discipline and became a teacher.”

“HDP is not important for experienced staff”

“HDP training is not important for those who took pedagogical courses in undergraduate and postgraduate courses.”

Some of the respondents also said that the instructors of educational and behavioral college should offer the program and the HDP training needs improvement in its method of delivery by incorporating graduates (trained instructors) feedback where as one of the respondents said, “*I only attend the training for the sake of certification. The program needs more consideration and practical activity*”.

The above qualitative analysis also go with the finding of the quantitative analysis and it showed the importance of HDP though the HDP training needs some improvements with respect to the delivery of the training, selections of the trainers, and the HDP curriculum needs to have a discipline specific approach.

3.2 The Perceived Practices of the HDP Training

In order to know whether the HDP trained instructors of HE apply the knowledge and skill that they have acquired from the HDP, the trained instructors were asked to forward their ideas using a questionnaire designed on a Likert scale ranging from ‘strongly disagree’ (1) to

‘strongly agree’ (5). Table 4 presents the summary of the results.

Reflective teachers employ active learning and student-centered teaching methods. Those who have attended the HDP education are of high quality, high competence and efficiency for their specific role in producing better and better students in Ethiopia (MOE, 2018).^[24] In a similar way, as it is presented in table 5, 92.3% of the trained instructors use reflection to improve their teaching and learning process. 84.7% of the respondents try to identify their strengths and limitation on their instructional process and 83.6% of the respondents discuss with their colleagues improving their mode of lesson deliveries.

Active learning accommodates a variety of learning styles, enhances student performance, increases learner motivation, changes student attitudes, and induces learners to learn more. It also leads the individual to his or her full potential. It involves developing a variety of skills - critical thinking, independent inquiry, and group participatory skills (Silberman, 2006)^[31] In the same way, 86 (94.5%), as well as 81 (89.1%) of the respondents of the questionnaire, indicated as they apply the active learning approach and use the student-centered method respectively. Despite the fact, 59 (64.9%) of the respondents often use a lecture method in their classroom, which contradicts with their use of active learning/student-centered method of teaching-learning approach.

In addition, 66 (72.6%), 82 (90.2%), 81 (89.1%), and 45 (49.5%) of the respondents of the questionnaire revealed that as they encourage students to make their own notes rather than taking notes, use students diverse backgrounds as an input to enrich the lessons they teach, revise their teaching methods in order to help students to develop a critical literacy that involves the development of analytic abilities and try to make a good relationship with their students respectively. These finding contradicts with the finding of Robsan (2020).^[30]

Moreover, research on assessment revealed that the right kinds of formative assessment activities and the right uses of data generated by those activities contribute to better learning (Clarke, 2011).^[10] It is true that more than 85% of the respondents support this idea. As the data obtained from 80 (87.9%) of the respondents indicated the HDP trained instructors often use different assessment techniques to evaluate the performances of their students instead of using only mid-term and final examinations. They (82 or 90.2%) regularly assess whether their students really understood the lessons or not using different techniques and 78 (85.8%) of the respondents use the assessment result as an input to improve their teaching duties.

Table 4: HE Instructors Perceived Practices of HDP

N	Items	M	Disagree		Neutral		Agree	
			N	%	N	%	N	%
1.	I often use reflection as a means to improve my teaching practices	4.1	5	5.5	2	2.2	84	92.3
2.	I very often try to identify my strengths and limitations with respect to my day-to-day instructional practices	4.1	6	6.6	8	8.8	77	84.7
3.	I usually discuss with my colleagues about on how to improve our mode of lessons deliveries	4.1	7	7.7	8	8.8	76	83.6
4.	I apply an active learning method/participatory approach in my class	4.4	4	4.4	1	1.1	86	94.5
5.	I often use a student centered teaching and learning method in my classroom	4.3	6	6.6	4	4.4	81	89.1
6.	I often use a lecture method in my classroom	3.7	21	23.1	11	12.1	59	64.9
7.	I usually encourage my students to make their own notes rather than taking notes	3.8	13	14.3	12	13.2	66	72.6
8.	I often attempt to use students' diverse backgrounds as inputs to enrich the lessons I teach	4.3	5	5.5	4	4.4	82	90.2
9.	I often revise my teaching methods in order to help the students to develop a critical literacy that involves the development of analytic abilities.	4.2	6	6.6	4	4.4	81	89.1
10.	I usually try to make a good relationship/rapport with my student	4.4	4	4.4	42	46.2	45	49.5
11.	I very often use different assessment techniques to evaluate the performances of my students instead of using only mid-term and final examinations	4.3	6	6.6	5	5.5	80	87.9
12.	I regularly assess whether my students really understood my lessons or not.	4.2	6	6.6	3	3.3	82	90.2
13.	I use the assessment result or marks as inputs to improve my teaching duties	4.1	9	9.9	4	4.4	78	85.8
14.	I often conduct action research in order to solve the problems I encounter in day-to-day teaching practices	3.5	23	25.3	21	23	47	51.7
15.	I often encourage students to engage in problem-solving techniques through the application of action research.	3.9	12	13.2	10	11	69	75.9
16.	I often encourage students to engage in critical thinking techniques through the teaching and learning process	4.3	3	3.3	6	6.6	82	90.2
Grand value		4.1	8.5	9.34%	8.8	9.7%	73.7	81%

Note. M=below 2.49-disagree, M= 2.5-3.49-neutral, M=above 3.5 agree

With respect to the research-related activities, half of the HDP trained instructors of the respondents (51.7%) conduct action research in order to solve the problems they encounter in day-to-day teaching practices and 74 (81.4%) of the respondents engage in research activities. As their response indicated, 69 (75.9%) of the respondents encourage students to engage in problem-solving techniques through the application of action research and 82 (90.2%) of the respondents encourage students to engage in critical thinking techniques through the teaching and learning process. In general, as the grand mean value indicated the perceived practice of the trained instructors of the HE is in a better way having the mean score of 4.1 and a standard deviation of 0.97.

Despite the fact, the qualitative finding revealed that the HEIs are not following whether the theoretical knowl-

edge achieved from the training was actually being practiced in the instructors' teaching classroom or not, which is similar with the finding of Miressa (2019).^[23] According to his finding the actual classroom practice of teachers are different from what is required from them. Similarly, the interviewee HDC1 said that:

One of the problem in the HDP is that you just train them (the trainees) and let them go ... There is no any kind of monitoring and evaluation whether they have applying the pedagogical skill that they have achieved in their classroom or not. After certification there is no way to check how they are applying the achieved skills and knowledge from the HDP. There is no any way to monitor and then to evaluate the implementation of the program, the impact of the program...

One of the respondents of the open-ended item also

said, “The goal of HDP and the situation in the ground are contradictory.”

From the interview conducted we can understand that the HEIs are not following whether the theoretical knowledge achieved from the training is actually being practiced by the instructors’ in their classroom teaching.

3.3 The Difference in Perception and Perceived Practices of HDP

With respect to the difference in perception and perceived practices of HDP, before conducting the analysis of variance (ANOVA) the variance in each condition is checked and it became similar, the normality is also checked and the distributions within groups are normally distributed and it is therefore robust to conduct one-way ANOVA. Accordingly, One way ANOVA was conducted and found that no perception difference towards HDP across the respondents’ age, education level, academic rank, teaching experience, educational career, departments, and colleges that the p-values were greater than the pre-set level of significance ($P > 0.05$). However, as the computed one-way ANOVA indicated the perceived prac-

tices of the HDP have a statistically significant difference due to experience of teaching ($F=1.727, p=0.036 < 0.05$), which has a moderate effect size ($\delta=0.48$). Table 5 presents the summery results.

3.4 The Relationship between HE Instructors Perception of HDP with the Practices of HDP

The study used bivariate correlation to see the extent of the relationship between HE instructors’ perception of HDP with the perceived practices of HDP, age, education level, academic rank, and teaching experiences of HE Instructors. Table 6 presents the summery of the results.

As shown in Table 6, HE instructors perception was found a significant correlate with the practices of HDP ($r=.694, p=0.00 < 0.01$) than any other variables, which indicated substantial correlation. HE teaching experience and educational level had also a significant correlate with age (r ranging from .560 to .234, p ranging from .000 to .026 < .05). In addition, instructors academic rank had also a significant correlate with educational level ($r=.373, p=.000 < .05$).

Table 5: Differences in Perceived Practices of HDP among HE Instructors Experience of Teaching in HE of Jimma town

EXPERIENCE	Sum of Squares	Df	Mean Square	F	Sig.	Effect size (δ)
Between Groups	1217.003	31	39.258	1.727	.036	0.48
Within Groups	1341.437	59	22.736			
Total	2558.440	90				

Table 6: Total Group Inter-correlations for the Variables Used in Quantitative Study

No	Variables	1	2	3	4	5	6	7
1	Perception	—						
2	Age	-.052	—					
3	Edn. Level	-.003	.234*	—				
4	Academ.Rank	-.012	.192	.373**	—			
5	Experience	-.093	.560**	.035	.098	—		
6	Practice	.694**	.025	-.024	-.142	-.088	—	

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

4. Discussions

According to Zhao et al. (2019)^[36] active participation in professional development (PD) enhances teachers' knowledge, skills, values, and attitudes. To enhance these knowledge, skill, and attitudes of teachers towards their PD in-service PD training is an important issue for instructors (Darling-Hammond & Cook-Harvey, 2018;^[11] Ajani, 2019).^[4] Similarly, the HEIs of Jimma town showed the importance of the HDP (M=4.3, SD=0.91), which is similar with the findings of Zelalem (2017)^[35] and Abdissa (2017).^[2] Nevertheless, the HE instructors' perception differs before coming to the HDP and after coming to the program. Before coming to the program majority of teachers perceive HDP as a waste of time and after they start the training the perception of the majority of those teachers will be changed because of the participatory nature of the HDP. Therefore, they will be interested and then they will develop a good attitude and perception towards the HDP after they joined or attend three to five HDP sessions and they do not want to miss it.

According to Ajani (2019)^[4] one of the aim of teachers PD is to improve the attitudes and teaching strategies of classroom practices that would affect the quality of instruction the learners will receive. It is complex process that involves teachers to share their concepts, beliefs, resources, practices, and support (Kruse et al., 2018).^[21] It also requires training, practice, feedback and provides adequate time and follow-up support (Nasreen & Odhiambo, 2018).^[29] Reflective teachers employ active learning and student-centered teaching methods. Those who have attended the HDP education are of high quality, high competence and efficiency for their specific role in producing better and better students in Ethiopia (MOE, 2018).^[24]

Similarly, as this study revealed, the HE instructors have a better perception towards the actual practices of the HDP, which have the mean score of 4.1 and a standard deviation of 0.97. However, the HDP office did not follow, monitor and support instructors' actual practices of HDP when they engaged in their actual teaching-learning process after completing the HDP training. From these we can understand the prevailing difference between the intention of the HDP training and actual classroom teaching practices. The HDP training was designed to improve the classroom teaching skill of the instructors but what actually teachers perceive to practice is different from the intention of the training.

With respect to the difference in perception and perceived practices of HDP, the computed one-way ANOVA indicated that the perceived practices of the HDP have a statistically significant difference due to experience of

teaching ($F=1.727$, $p=0.036<0.05$), which has a moderate effect size ($\delta=0.48$). From this we can understand that as the level of teaching experience increases the perceived practices of the HDP will also increase. Therefore, the teaching experience matters the perceived practices of the HDP in the HEIs.

As we know the perception of teachers can affect the classroom practices of a given instructor. To improve teachers' perception, teachers training and seminars play an important role and improve teachers' effectiveness in their teaching profession (Darling-Hammond & Cook-Harvey, 2018).^[11] Teachers' professional development aims to improve teaching strategies and perceptions towards classroom practices that would affect the quality of instruction the learners will receive (Ajani, 2019).^[4] Similarly, to see the relationship between the HE instructors perception on the importance of HDP with the perceived practice of HDP, the study used bivariate correlation and the study depicted that the HE instructors' perception was found a significant correlate with the practices of HDP ($r=.694$, $p=0.00<0.01$) than any other variables, which indicated a substantial correlation.

5. Conclusions

The HDP help teachers to develop the experience of identifying their limitations and strengths for improving the teaching-learning process. It promotes active learning, opening free interactions between learners and trainers followed by reflections and feedbacks. So that developing a positive attitude towards the HDP and trying to apply the experiences achieved in the training plays a great role for the PD of the HE instructors, to improve students' learning and ultimately to bring about quality education. The effectiveness of the HDP lies in the proper application of the HDP. Without proper implementation of the HDP, it is difficult to talk about the PD of HE instructors of Ethiopia. Nevertheless, rather than giving the training, the HEIs are not following whether the theoretical knowledge achieved from the training was actually being practiced in the instructors' when teaching in their classrooms. The HE instructors' perception of HDP has also a high relationship with the practices of HDP. This indicates that instructors' perception of HDP will be improved as the practices of HDP improved. Therefore, improving the perception of instructors is essential for the betterment of the program and to achieve the intentions of the HDP. Generally, this study help to see the perception of HE instructors on the importance of the HDP, perceived practices of HDP for the actual work and it indicates the relationship between instructors perception and its perceived practice of the HDP. Therefore, the paper will contribute to identify the

gap, which manifests in the professional development activities in the HEIs of Ethiopia.

6. Limitations

Although the data was obtained from university instructors in the HEIs of Jimma town, the results may not necessarily reflect the rest universities across the country since it needs to increase the sample of the study. Though the study considered the primary data, the HDP session was not observed to further substantiate the study results, as the program was not running during the study period. Hence, it needs further study to generalize the results of the study and the other researchers may study on the actual relationship between the HDP training and classroom practice, the impact of HDP on teachers' professional development and students' achievement.

7. Recommendations

The HDP office should work towards creating awareness on the importance of the program in collaboration with colleges and higher officials. It should establish a follow-up and monitoring mechanism, as well as, need to develop a short-term training to solve the problems associated with the perceptions of the instructors towards the HDP. The HDP coordinating office is expected to conduct an impact assessment to see the effectiveness of the program too.

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Competing Interests

The authors declare that they have no competing interests.

Contributors/Acknowledgement

Both authors contributed equally to the conception and design of the study.

Contribution/Originality

This study contributes to the existing literature about higher education instructors perception of the importance of higher diploma program (HDP) and their perceived practices of the program.

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Appendixes

Appendix I: Interview Guide Designed for HDC and HDLs

Part I. General information

Gender _____ Age _____ Level of education _____ Academic rank _____ Experience of teaching in HE _____

Part II. Main data information

1. How do HE instructors’ perceive the HDP?
2. Do you believe that the HD training is relevant for the PD of HE instructors’? How?
3. Do you think that the HDP can make HE instructors’ to rethink about the nature of their teaching and

- learning or changed the way they teach? If yes, how? If no, how? why?
4. How do you perceive the actual practice of the HDP
 5. How do the HD trained instructors’ practice the knowledge and skills that they have got from the training in their actual classroom?
 6. How do you monitor and evaluate the achievement of the HD training?

Appendix II: Codes Given for Interviewee

Code	Date E.C	Duration of interview	Responsibilities
HDC1	2021-10-03	00:36:38	Higher Diploma (HD) Coordinator
HDC2	2021-10-03	00:12:00	HD Coordinator
HDL1	2021-10-04	00:09:41	HD Leader
HDL2	2021-10-04	00:18:38	HD Leader
HDL3	2021-10-05	00:12:00	HD Leader

Author Guidelines

This document provides some guidelines to authors for submission in order to work towards a seamless submission process. While complete adherence to the following guidelines is not enforced, authors should note that following through with the guidelines will be helpful in expediting the copyediting and proofreading processes, and allow for improved readability during the review process.

I . Format

- Program: Microsoft Word (preferred)
- Font: Times New Roman
- Size: 12
- Style: Normal
- Paragraph: Justified
- Required Documents

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All articles should include a cover letter as a separate document.

The cover letter should include:

- Names and affiliation of author(s)

The corresponding author should be identified.

Eg. Department, University, Province/City/State, Postal Code, Country

- A brief description of the novelty and importance of the findings detailed in the paper

Declaration

v Conflict of Interest

Examples of conflicts of interest include (but are not limited to):

- Research grants
- Honoria
- Employment or consultation
- Project sponsors
- Author's position on advisory boards or board of directors/management relationships
- Multiple affiliation
- Other financial relationships/support
- Informed Consent

This section confirms that written consent was obtained from all participants prior to the study.

- Ethical Approval

Eg. The paper received the ethical approval of XXX Ethics Committee.

- Trial Registration

Eg. Name of Trial Registry: Trial Registration Number

- Contributorship

The role(s) that each author undertook should be reflected in this section. This section affirms that each credited author has had a significant contribution to the article.

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2. Reference List

3. Supplementary Data/Information

Supplementary figures, small tables, text etc.

As supplementary data/information is not copyedited/proofread, kindly ensure that the section is free from errors, and is presented clearly.

III. Abstract

A general introduction to the research topic of the paper should be provided, along with a brief summary of its main results and implications. Kindly ensure the abstract is self-contained and remains readable to a wider audience. The abstract should also be kept to a maximum of 200 words.

Authors should also include 5-8 keywords after the abstract, separated by a semi-colon, avoiding the words already used in the title of the article.

Abstract and keywords should be reflected as font size 14.

IV. Title

The title should not exceed 50 words. Authors are encouraged to keep their titles succinct and relevant.

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IV. Section Headings

Section headings, sub-headings, and sub-subheadings should be differentiated by font size.

Section Headings: Font size 22, bold type

Sub-Headings: Font size 16, bold type

Sub-Subheadings: Font size 14, bold type

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V. Introduction

The introduction should highlight the significance of the research conducted, in particular, in relation to current state of research in the field. A clear research objective should be conveyed within a single sentence.

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In this section, the methods used to obtain the results in the paper should be clearly elucidated. This allows readers to be able to replicate the study in the future. Authors should ensure that any references made to other research or experiments should be clearly cited.

VII. Results

In this section, the results of experiments conducted should be detailed. The results should not be discussed at length in

this section. Alternatively, Results and Discussion can also be combined to a single section.

VIII. Discussion

In this section, the results of the experiments conducted can be discussed in detail. Authors should discuss the direct and indirect implications of their findings, and also discuss if the results obtain reflect the current state of research in the field. Applications for the research should be discussed in this section. Suggestions for future research can also be discussed in this section.

IX. Conclusion

This section offers closure for the paper. An effective conclusion will need to sum up the principal findings of the papers, and its implications for further research.

X. References

References should be included as a separate page from the main manuscript. For parts of the manuscript that have referenced a particular source, a superscript (ie. [x]) should be included next to the referenced text.

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Graphs, figures and tables should be labelled closely below it and aligned to the center. Each data presentation type should be labelled as Graph, Figure, or Table, and its sequence should be in running order, separate from each other.

Equations should be aligned to the left, and numbered with in running order with its number in parenthesis (aligned right).

XII. Others

Conflicts of interest, acknowledgements, and publication ethics should also be declared in the final version of the manuscript. Instructions have been provided as its counterpart under Cover Letter.

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