Challenges and coping strategies among distance education learners: Implication for human resources managers

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Abstract
This study examined challenges and coping strategies among distance education learners and their implications for human resources managers. The quantitative and descriptive survey design was adopted, and a sample of 1358 university students pursuing distance programmes was drawn from a study population of 44,458 distance undergraduate and postgraduate students. The data collection instrument was a questionnaire, and the data obtained was analysed with Partial Least Square Structural Equation Modelling (PLS-SEM). The study found that instructional challenges, psychological challenges, socio-religious challenges and institutional challenges had a statistically significant relationship with coping strategies and educational output among distance learners. Coping strategies also obtained a statistically significant relationship with educational output. The four main effective coping strategies identified among distance learners were problem-focused, emotion-focused, preventive and proactive coping strategies. It was recommended that human resource managers provide orientation, counselling on coping strategies, decent and suitable teaching and learning facilities, supply modules and communicate assessment feedback on time, and provide competent and committed course tutors to help reduce challenges faced by distance learners.

Keywords Challenges · Coping strategies · Distance education learners · Implications · Human Resource Managers

Introduction
The role of higher education in the national development of human resource for both social and personal advancement cannot be underestimated (Agbofa, 2012). This is because nations worldwide have resulted in the use of education as a conduit for achieving national development and social change. Universities in developing economies like Ghana, among others have had the unpleasant duty of turning down qualified applicants for lack of limited facilities and deteriorating facilities associated with the increasing cost of providing tertiary education in Ghana (Segbenya et al., 2019). One of the measures adopted by the government of Ghana and other developing economies to address the enrolment challenges was the introduction of distance education as a viable alternative to the conventional/regular campus face-to-face education and training. Since its introduction, distance education has become a conduit for existing and new educational institutions to admit the working class (Segbenya & Nyieku, 2021). Thus, improving learners’ access to quality tertiary education remains one of the significant reasons for distance education.

The introduction of distance education in Ghana can be traced to 1982 when the Modular Teacher Training Programme (MTTP) was introduced (Mends-Brew & Asabere, 2016). About 7,537 untrained teachers received professional training through some sort of distance education and were awarded Teachers Certificate ‘A’ through the MTTP. Though the MTTP programme was short-lived, the Government of Ghana’s commitment through the Ministry of Education (MOE) propelled it to investigate the distance education need of Ghana from 1991 to 1994 (Mends-Brew & Asabere, 2016). Recommendations from the study served as the
basis for which four public universities later started distance education programmes in Ghana. These universities were the University of Education, Winneba (UEW), University of Cape Coast (UCC), Kwame Nkrumah University of Science and Technology (KNUST) and University of Ghana (UG) (Ohene & Essuman, 2014). The distance mode has contributed to increased enrolment figures for all these universities and several other institutions that have resorted to the distance mode for delivering their educational content.

Method or mode of delivery in emerging economies like Ghana is still largely characterised by print media usage for face-to-face interaction during weekends. This mode of delivery is further characterised by a separation between the learner (who is mostly a working adult) and tutor/s in terms of space and time; and communication between the learner and the tutor is mediated by print media or information, communication and Technology (ICT) (Mnyanyi & Mbwette, 2009; Segbenya & Nyieku, 2021). Thus, distance education institutions in developing countries like Ghana use a franchise model where each district has designated study centres where students attend face-to-face tutorials and write their examinations.

Despite the benefits of distance education by offering a higher degree of flexibility in meeting learners’ aspirations for higher education whiles meeting competing priorities of work and home at the same time, among others, it is not without a challenge to both learners and providers. Challenges faced by distance learners in Ghana as a developing economy could be categorised under institutional, instructional, social, psychological, and financial challenges (Mends-Brew & Asabere, 2016). Student motivation could be affected by less contact between students and tutors and peers due to bi-weekly face-to-face arrangements (Agbofa, 2012; Mends-Brew & Asabere, 2016). The usage of part-time course tutors and only face-to-face sessions for course delivery tends to pose several instructional challenges to learners. Inadequate faculty support for learners could also affect students’ ability to progress and complete their study programmes (students’ output) (Osaf, 2017; Kwaah & Essilfie 2017). The emergence of the Covid-19 pandemic and post-pandemic challenges could have also posed several challenges (Upoalkpajor & Upoalkpajor, 2020) to distance learners since facilitation is still largely without an online interactive component and learners are mostly adult workers.

Distance learners in Ghana are largely adults, married and parents, suggesting a huge demand on their time. The several roles and responsibilities of distance learners have the propensity to pose psychological, socio-religious and financial/economic challenges to these learners. The demands of these multiple roles on these distance learners could pose work, academic and life balance-related challenges. Students could have herculean tasks attending to the demands of their personal lives, academic activities (teaching and learning), and that of their employer. Inability to address all the dictates of the three constituents (life, education, and work) will result in work and life conflict among distance learners. Work, academic and life conflicts further pose high-level stress upon distance learners and ultimately affect their academic performance (Segbenya & Peniana, 2021).

Distance learners are required to commute from their homes to the study centre for their face-to-face related activities. This exposes distance learners to transportation risks and delays which might affect their ability to get to their study centre on time. Thus, the punctuality and regularity of distance learners at the study centres for face-to-face could be affected. The transportation to and from the study centre could also place an additional financial burden on the meagre earnings of distance learners. Furthermore, distance learners coming from very distant places will also need to hire accommodation around the study centre for a day or two to attend the face-to-face sessions. Apart from accommodation, it is also possible that these distance learners might also be incurring additional feeding costs for being away from home (Segbenya & Nyieku, 2021).

Also, the usage of hired facilities belonging to a second circle institution to deliver a university course content also comes with associated institutional-related challenges regarding the suitability of furniture and washrooms, among others, for distance learners (Segbenya et al., 2019). All these challenges could affect the academic performance or outcomes of distance learners. The face-to-face tutorial and the dependency on the print media-modules/course material for teaching and learning also come with inherent challenges to the distance learner. Delays in supplying modules or course materials could affect the academic performance of distance learners. Additionally, distance learners could also suffer from typographical challenges and the inability to cover modules that span several pages. Furthermore, distance learners could also face an institutional challenge in the form of delays in resolving student assessment-related challenges and communicating timely feedback on students’ continuous assessment. Failure to give feedback on students’ continuous assessment can affect distance learners’ preparation for their examinations (Agbofa, 2012).

Technological challenges faced by distance learners in Ghana relate to internet connectivity challenges and the cost of data for the internet. Distance learners stay in rural communities, and their desire to learn independently and search for academic-related information to enhance comprehension of what was taught could be hampered by the lack of internet connectivity in their communities. Closely related is the lack of online tools such as laptops, desktop
computers, and tablets to search for information from the web (Segbenya et al., 2022).

Culturally and historically, distance learners in Ghana see human resource managers as responsible authorities who have the power to reduce challenges associated with their distance programmes. This is because human resource managers are responsible for the employment of course tutors for delivering course contents on the distance mode. The hiring of franchised facilities for hosting distance programmes are also done by human resource managers for their institutions. Other roles played by human resource managers distance education include invigilation of exams, distribution of course materials and processing of assessment scores for distance learners. Thus, the expectation of distance learners is that their challenges with distance programmes could be reduced significantly if human resource managers play their roles well (Ohene & Essuman, 2014).

Studies conducted on challenges and prospects facing distance learners in Ghana by Agbofa (2012), Ohene and Essuman (2014), Osafo (2017) and Kwah and Essilfie (2017) perceived distance students as passive agents who could not do anything about their challenges. Meanwhile, distance learners are active agents who could take their destiny into their own hands by finding their own coping strategies to mitigate the challenges they face with their distance education. For this reason, this study sought to examine challenges and coping strategies among distance education learners.

**Literature review**

The section delved into the theoretical and conceptual perspectives on challenges and coping mechanisms, or strategies adopted by distance learners.

**Theoretical review of coping strategies**

The transactional coping theory considered in this study helps to discuss how and why individuals need to manage different circumstances and cope with challenges associated with situations. The transactional coping theory has two axioms- situational factors and personality-based collectively affect the cognitive capacity of individuals to evaluate a challenge and the right coping strategy to be adopted (Osafo, 2017). Situational characteristics and individual characteristics were identified as the main precursors of the transactional coping theory (Reyagalatetsa, 2015; Osafo, 2017). Commitments, beliefs and traits of an individual constituted the individual characteristics, whiles novelty and the uncertainty of the event also defined the situational characteristics. Two main coping strategies later emerged, such as emotional-focused and problem-based focus coping strategies (Osafo, 2017). The problem-focused coping strategies relate to a situation where individuals solve the relevant external problem and include a problem-oriented approach aimed at the self (Dorp & Monteros, 2010). On the other hand, emotion-focused coping strategies deploy several tactics to mitigate or reduce related emotional stress produced by the problem. Even though both coping strategies are used in most stressful encounters, they depend on how one appraises the situation (Schwarzer & Knoll, 2007).

**Conceptual review and hypotheses development**

**Challenges of distance learners**

Challenges of distance learners are diverse and could be categorised into the FIIPS categorisation such as financial, instructional, institutional, psychological and social challenges (Mends-Brew & Asabere, 2016). This section discusses the challenges under this specific categorisation.

**Financial challenges and academic output of distance learners**

The first to discuss is the financial challenges that the distance learner faces. Most distance learners are mostly confronted with how to meet the financial dictates of the academic programmes pursued on the distance mode (Koomson, 1998; Segbenya et al., 2019). Distance learners, especially in developing economies, could be found among the least paid workers. The cost of their further studies on academic programmes pursued on the distance mode in developing economies are borne by such learners themselves (Osafo, 2017).

The majority of these distance learners equally have a huge financial obligation towards their families which results in a high level of stress on students, which eventually results in delay in completion of academic programmes or likely drop out from the programme due to lack of interest in the programme (Bampo, 2008). This suggests that distance learners will patronage academic programmes with low cost and especially lower than on-campus academic programmes (Osafo, 2017). Distance learners in developing economies also sometimes do not attend face-to-face tutorials regularly due to financial burdens, especially if they have to travel a distance to their study centres for a day or two, which will demand extra accommodation and feeding cost away from home (Segbenya et al., 2019). This also significantly affects their academic performance in the longrun.
Institutionally related challenges and academic output of distance learners

Another challenge distance learners face is institutionally related challenges that manifest themselves in five main forms: infrastructure or study centre-related challenges, delay in supplying course materials, quality and calibre of course facilitators, delay in resolving students’ assessment-related challenges, internet or technology-related challenges for online courses (Segbenya & Peniana, 2021). Learners’ challenges regarding infrastructure borders on classroom furniture and washrooms. Distance educational institutions do not have their own permanent built facilities hosting their distance programmes in the various districts (Segbenya & Peniana, 2021). For this reason, they relied on franchised facilities or infrastructure/study centres in various communities to roll out their distance programmes. Most of these facilities are somewhat below the standard existing on regular campuses. The most extensive challenges distance learners have in these hired facilities are poor sanitary conditions and uncomfortable furniture in the classrooms, making sitting down for a long time during face-to-face sessions very challenging for distance learners (Segbenya et al., 2019).

Delay in printing course materials could be responsible for late distribution of modules to distance learners (Bampo, 2008; Osafo, 2017) found subletting the production function of modules to private entities as a cause of delay in supplying course materials to distance students. Such delays have the potential of impacting on students performance and satisfaction with academic programmes (Segbenya & Peniana, 2021). Distance learners also have several challenges with the calibre of course facilitators appointed by the various institutions to handle such courses (Fricke, 2010). The part-time tutors are sometimes not committed to the distance programmes and are not of the same qualification as their counterparts in the regular stream (Segbenya & Nyieku, 2021; Mamhute, 2011). The commitment and qualification differences could affect tutors’ delivery of course materials and could also affect distance learners’ ability to do well in their academic programmes. Thus, institutional related factors could have effect on educational output and the coping mechanisms adopted by distance learners. It is for this reason that this study hypothesised that:

1. \( H_0 \): Institutional challenges do not significantly affect the coping mechanisms of distance learners.
2. \( H_0 \): Institutional challenges do not significantly affect the educational output of distance learners.

Instructional challenges and academic output of distance learners

Instructional challenges faced by distance learners include isolation (Agbofa, 2012) between the learner and teacher which lack the usual social interactions that characterised learning on regular campus (Egenti & Omoruyi, 2011). Most distance adult learners also had challenges with the usage of technology (computers and the internet) to aid their learning. Lack of online skills on the part of distance learners can affect students desire and ability to participate in online learning (Agbofa, 2012). Thus, technology related challenges will need to be addressed for a blended distance education to be effective.

The instructional challenges among distance learners in developing economies are more frightening due to the lack of a blended approach (online and face-to-face) to delivering course content but demand that learners be present at every face-to-face (Segbenya et al., 2019). Thus, learners who absent themselves from such in-person interaction could never benefit from it since such face-to-face sessions are also not recorded for learners’ reference in the future (Segbenya & Peniana, 2021). In most of this in-person interaction between students and tutors, most of the sections of the course materials are also not covered. The already busy distance learner is required to read the remaining sessions of the course modules on his/her own, whether such concepts to be read are technical or not (Segbenya & Peniana, 2021). This means that instructional challenges has the propensity to influence distance learners academic/educational output and the need for them to adopt a coping strategies for such challenges. In line with the foregoing discussion, this study hypothesised that:

3. \( H_0 \): Instructional challenges do not significantly affect the coping mechanisms of distance learners.
4. \( H_0 \): Instructional challenges do not significantly affect the educational output of distance learners.

Psychological challenges and academic output of distance learners

Psychological challenges come from stress suffered by distance learners due to the number of roles they need to perform as parents, spouses, learners, workers and sometimes religious or community leaders (Harisson, 2008; Mamhute, 2011). The lack of academic counsellors at the various study centres and tight tutorial sessions makes it highly difficult for distance learners to get some academic counselling at the various study centres. Lack of counselling on how to manage conflicting roles for distance learners contributes to the high level of stress and burnout among distance learners.
and has a very high propensity for negatively impacting the academic outcome of distance learners and their ability to deliver on other responsibilities. Frustrated distance learners who cannot manage the stress can choose to defer or drop out from the academic programme by wasting his/her investment and cutting short their educational aspiration (Harisson, 2008; Mamhute, 2011). Based on the review, this study hypothesized that:

5. \( H_0^o \): Psychological challenges do not significantly affect the coping mechanisms of distance learners.

6. \( H_0^o \): Psychological challenges do not significantly affect the educational output of distance learners.

**Socio-religious or community-related challenges and academic output of distance learners**

The last challenge category of challenges of distance learners to be reviewed is socio-religious or community-related challenges (Bampo, 2008; Mamhute, 2011; Segbenya et al., 2019). Distance learners work during the weekdays and attend face-to-face sessions on the weekends. In developing economies like Ghana, most social events such as marriage ceremonies, funerals and religious activities such as church meetings and other social gatherings occur at the weekends (Segbenya et al., 2019). This makes it very difficult for distance learners to partake in such activities since their face-to-face session crushes with such activities even if the celebrants are close friends or family members. During their academic programmes, society could see distance learners as irresponsible for their failure to participate in such revered societal programmes as funerals in an African context. Distance learners’ inability to participate in recreational activities like sports, among others, on weekends could have also contributed to the level of stress they suffer (Harisson, 2008; Grohman & Lamm, 2009). Thus to test for the relationship between socio-religious challenges and educational output of distance learners, the study hypothesized that:

7. \( H_0^o \): Socio-religious challenges do not significantly affect the educational output of distance learners.

8. \( H_0^o \): Socio-religious challenges do not significantly affect coping mechanism among distance learners.

**Coping and coping strategies**

Puhl and Brownell (2003) described coping as a mental and behavioural involuntarily reaction by a person to save themselves from anxiety-provoking emotions. Pant (2014) also posits that coping relates to a mental process employed by an individual against demands in the form of a struggle with emotions and conflicts. Puhl and Brownell (2003) further argued that coping strategies can change over time because it is a process and need to be assessed since the assessment reveals the analytical potential of the processes (Eisenbarth, 2012; Folkman, 2008). That is if the causative factors of challenges in the external environment change, then the coping strategies must change. Reyagalaletsa (2015) therefore, concluded that such a coping strategy is a problem-focused coping strategy. Meanwhile, when individuals vary their reactions to what is happening, then that strategy relates to emotion-focused coping (Reyagalaletsa, 2015).

**Preventive coping**

Individuals’ reactions to uncertain or unlikely threats that might occur in the future relates to preventive coping strategy. Thus, resources are gathered, and safeguards measures are put in place against future threats (Schwarzer, 2000). The aim of gathering resources ahead of time is to build a defensive mechanism or resources against a future threat to mitigate or reduce the impact of the future threat when it occurred. Alternatively, preventing coping strategies could lead to the elimination of threat that relate to challenges with exams failure, forced retirement, interpersonal, crime, illness and financial challenges (Schwarzer, 2000; Schwarzer & Knoll, 2007).

**Proactive coping**

Proactive coping also can be described as individuals’ strategies to accumulate resources and develop a skill/s aimed at tackling at uncertain goals (Schwarzer, 2000). Thus, skill development, general and personal growth is achieved with proactive coping. A key characteristic of a proactive coping strategy is the management of goal and not risk management in that individuals perceive opportunities, risks and demands in the future not as a threat but evaluate demanding situations as personal challenges. According to Schwarzer (2000), personal growth is attained under a proactive coping strategy because the individual becomes proactive and not reactive to happenings. Schwarzer and Knoll (2007) concluded that individuals using proactive coping strategies do not react to challenges with distress but are rather motivated to deal with the challenge when it surfaces. It is based on the forgoing discussion that the study hypothesised that:

9. \( H_0^o \): Effective coping strategies do not significantly affect the educational output of distance learners.

Thus, from the conceptual and theoretical review, a conceptual framework carved to guide the study is presented in Fig. 1.
the proportional stratified sampling technique. Grouping of subjects in a population into the same characteristics (strata) is related to a stratified sample (Creswell, 2009). Thus, another probability sampling technique (cluster or simple random sampling) is deployed for each subgrouping or stratum (Segbenya, 2012). The stratified sampling technique was employed because the population’s characteristics were diverse, and there was a need to ensure that every character was adequately represented in terms of diploma, degree, and postgraduate students.

The instrument for data collection for this study was a self-administered questionnaire which had four sections—A, B, C and D, with section A dealing with the demographic characteristics of respondents and Sections B to D addressing the hypotheses guiding the study. The research instruments used items measured on a four-point Likert scale of 1 to 4, with 1 representing strongly disagreement, 2 = disagreement, 3 = agreement, and 4 = strongly agreed. A modified instrument from Ohene and Essuman (2014) on students’ challenges was adopted for measuring students’ challenges. Students’ challenges were measured from five dimensions: financial challenges, instructional challenges, institutional challenges, psychological challenges, and socio-religious challenges. The coping mechanism was also measured using an adopted scale from Osafo (2017), which focused on proactive and preventive coping mechanisms. All

**Methodology**

The cross-sectional survey design from the positivist perspective was used for this study. The design was adopted to collect one-time data from a large pool of respondents and describe the phenomenon as it exists (Segbenya, 2012). A total sample of 1385 from a study population of 44,458 distance undergraduate and postgraduate students pursuing both education and business programmes with two leading distance education institutions in Ghana (University of Cape Coast and University of Education, Winneba) nationwide were drawn for the study. The sample size is higher than the 381 recommended by Krejcie and Morgan (1970) sample determination table for a population size of 50,000. Thus, the 1485 sample for this study gives better representations.

Two probability sampling techniques were adopted to give equal chance or access to all elements in the study population to participate. These were simple random sampling techniques and stratified sampling techniques. The study adopted the lottery method of the simple random sampling technique. The creation of random samples and picking of numbers randomly, and ensuring that numbers picked agree with the item to a sample, repeating the process until the final sample is drawn, is termed as the lottery method of the simple random sampling technique (Segbenya, 2012). The second sampling technique adopted by this study was
and correlation analyses were also conducted to ensure that data met the quality required for higher inferential analyses.

Results and findings of the study

The presentation of the results of the study in this section is done in two folds- demographic characteristics of respondents and the main results for testing of the hypotheses guiding the study.

Demographic characteristics of respondents

The six demographic characteristics analysed in this section are age, sex, level, marital status, employment status and hours spent commuting to the study centre. Table 1, therefore, presents the results for the demographic characteristics of respondents. The results in Table 1 indicate that majority of the respondents were males (56.7%), pursuing bachelor’s degree programmes (64.5%) and were 21–40 years (49.8%). Additionally, most of the respondents were not married (54.7%), whereas public sector employees (57.1%) spent less than an hour commuting to the study centre (58.1%).

Results for testing hypotheses

Measurement of the structural model analysis

The preliminary evaluation of the model was done with the use of the PLS-SEM (Partial Least Square Structural Equation) algorithm for factor analysis (CFA). The strength of the model was enhanced by using items with a value of 0.70 for the respective variables as can be seen from the results presented in Figs. 2 and 3. Figure 3 shows all the items used
for measuring all the variables, and it can be seen that not all items loaded above 0.70 threshold.

Thus, such items were deleted, and only items that loaded 0.70 above were used, as seen from Fig. 3. Thus, Fig. 3 shows loadings for items used to form the variables and the CFA algorithm output shows that all items loaded above the 0.70 minimum threshold. Meanwhile, financial challenges with its items did not load well in Fig. 1 hence the deletion of the financial challenges variable in Fig. 3.

Internal consistency measure for the measurement model

The internal consistency of the SEM model was determined by examining the model’s reliability and convergent discriminant validity. These were achieved using four indices.

Table 2 Construct reliability and validity

| Outer Loadings | Cronbach’s Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|----------------|------------------|-------|-----------------------|----------------------------------|
| INSTCHL        |                  |       |                       |                                  |
| AS3            | 0.760            | 0.519 | 0.548                 | 0.803                            | 0.672                            |
| MD2            | 0.875            |       |                       |                                  |                                  |
| COPS           |                  |       |                       |                                  |                                  |
| CP1            | 0.705            | 0.617 | 0.637                 | 0.793                            | 0.561                            |
| CP3            | 0.806            |       |                       |                                  |                                  |
| CP5            | 0.733            |       |                       |                                  |                                  |
| EDUOUTPUT      |                  |       |                       |                                  |                                  |
| EO2            | 0.905            | 0.790 | 0.791                 | 0.905                            | 0.826                            |
| EO3            | 0.914            |       |                       |                                  |                                  |
| IC             |                  |       |                       |                                  |                                  |
| IC2            | 0.772            | 0.642 | 0.759                 | 0.840                            | 0.726                            |
| IC3            | 0.925            |       |                       |                                  |                                  |
| PSCHL          |                  |       |                       |                                  |                                  |
| PS1            | 0.781            | 0.531 | 0.547                 | 0.808                            | 0.679                            |
| PS2            | 0.864            |       |                       |                                  |                                  |
| SRCH           |                  |       |                       |                                  |                                  |
| SR3            | 0.936            | 0.874 | 0.880                 | 0.940                            | 0.888                            |
| SR4            | 0.948            |       |                       |                                  |                                  |

Source: Field survey (2021)

The reliability of the model was assessed using Cronbach’s alpha and composite reliability, while the convergent and discriminant validity measures were determined using the Average Variance Extracted (AVE) method. A criterion proposed by Henseler et al. (2015) for composite reliability and Cronbach Alpha of 0.70 and above and an AVE value of 0.50 and above served as the threshold used for this study.

The values ranging between 0.795 and 0.940 obtained for composite reliability for all four variables of the study in Table 2 confirmed that the model attained high composite reliability. Additionally, AVE values obtained ranged between 0.561 and 0.888 for all variables in the study, attest to the fact that a convergent validity was also achieved since all the values were above the 0.50 minimum threshold. Though the Cronbach alpha values and rho_A values were below the 0.70 thresholds for variables such as institutional and psychological challenges and coping strategies, these variables were not deleted from the model because they obtained acceptable composite reliability and AVE values acceptable for using the PLS model.

Discriminant validity

The Heterotrait-Monotrait Ratio (HTMT) is useful for checking how each variable can be differentiated from other variables in found in the model. Henseler et al. (2015) criterion of recording zero (0) for diagonal loading on the same construct and less than 0.85 between different constructs. Thus, results for HTMT, and all HTMT values presented in Table 3, were zero for the same constructs and between
Table 3  Discriminant validity:heterotrait-monotrait ratio (HTMT)

| Variables | COPS | EDOUOUTPUT | IC_- | INSTCHL | PSCCHL_- | SRC |
|-----------|------|------------|------|---------|-----------|-----|
| COPS      | 0    |            |      |         |           |     |
| EDOUOUTPUT | 0.415 | 0          |      |         |           |     |
| IC_-      | 0.630 | 0.066      | 0.558 | 0       |           |     |
| INSTCHL   | 0.617 | 0.433      |      |         |           |     |
| PSCCHL_-  | 0.333 | 0.272      | 0.106 | 0.257   | 0         |     |
| SRC       | 0.134 | 0.099      | 0.158 | 0.255   | 0.215     | 0   |

Source: Field survey (2021)

Correlation results for the relationship between the variables of the study. The descriptive statistics results for the variables of the study are presented in Table 4. Instructional challenge (M = 3.1659; SD = 0.60873) emerged as the highest rated challenge and the least challenge was institutional challenges (M = 2.0146; SD = 0.47645) among distance learners. Detailed descriptive results on types of coping strategies adopted by distance learners can be found in Appendix.

Scale: 1.5–1.9 = low; 2.0-2.4 = high; 2.5–2.9 = very highly; 3.0 = extremely high

Correlation results for the relationship between the variables are presented in Table 6. The results show that educational output of distance education learners (EDOUTPUT) had a statistical significant relationship with institutional challenges (ICH) (r = 0.310**; Sig. = 0.000); instructional challenges (INSTCH) (r = 0.134*; Sig. = 0.000); Psychological challenges (PSYCH) (r = 0.114**; Sig. = 0.000); and Coping Strategies (COPS) (r = 0.303**; Sig. = 0.000).

Results for path analysis

The determination of the path significance of the model was conducted, and the results in terms of graphical presentation can be seen in Table 7. The graphical presentation as seen in Fig. 4 agrees with Hair et al. (2017) criterion of using a bootstrapping sequence of 5000 samples to assess a structural model.

Table 7 presents the results of the nine hypotheses of the study. The R², as shown in Table 7, supported by the adjusted R² values, explains the variance in the dependent variable
Thus, the structural model explains about 0.273 variances in coping strategies and 0.233 variances in educational output. The results from Table 7 revealed that instructional challenges (ICH) had a statistically significant effect on both coping strategies (COPS) at ($\beta = 0.233$, $t = 9.776$, $p < 0.05$), and educational output ($EDUOUTP$) at ($\beta = -0.130$, $t = 4.557$, $p < 0.05$) for hypotheses two and hypothesis one respectively. Hypotheses three and four of the study were further supported by the results in Table 7 in that there was a statistically significant relationship between institutional challenges (INSTCH) and coping strategies at ($\beta = 0.233$, $t = 9.776$, $p < 0.05$); and institutional challenges (INSTCH) predicted by the independent variables (Hair et al., 2013). Thus, the structural model explains about 0.273 variances in coping strategies and 0.233 variances in educational output.

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Table 6  Correlation results for the relationship among the variables

|          | ICH   | INSTCH | PSYCHL | SRCH | COPS  | EDUOUTPUT |
|----------|-------|--------|--------|------|-------|-----------|
| Pearson Correlation | 0.331** | 0.126** | 0.174** | 1    | 0.310** | 0.134**   |
| Sig. (2-tailed) |      |        |        |      |       |           |
| N     | 1358  | 1358   | 1358   | 1358 | 1358  | 1358      |

Source: Field survey (2021)

Table 7  Path coefficients for disaggregated data

|          | R Square | R Square Adjusted | Beta | Sample Mean (M) | Standard Deviation | T Statistics | P Values | Confidence Intervals |
|----------|----------|-------------------|------|-----------------|--------------------|--------------|----------|---------------------|
|          |          |                   | 0.273 | 0.233           |                    |              |          |                     |
| COPS     |          |                   |       |                 |                    |              |          |                     |
| EDUOUTPUT|          |                   |       |                 |                    |              |          |                     |

Source: Field survey (2021) **$p < 0.000$, *$p < 0.05$ supported
and educational output (EDUOUTPUT) at ($\beta = 0.318$, $t = 12.690$, $p < 0.05$). Also, hypotheses five and hypothesis six also obtained statistical significance in that psychological challenges (PSCH) has a statistically significant relationship with coping strategies (COPS) among distance learners at ($\beta = 0.210$, $t = 6.363$, $p < 0.05$) and educational output (EDUOUTPUT) at ($\beta = 0.229$, $t = 8.005$, $p < 0.05$). The last three hypotheses (Hypotheses seven, eight and nine) were also supported. That is, socio-religious challenges (SRCH) had a significant relationship with coping mechanism (COPS) at ($\beta = -0.231$, $t = 8.164$, $p < 0.05$); and educational output (EDUOUTPUT) at ($\beta = 0.107$, $t = 3.613$, $p < 0.05$). Finally, coping strategies (COPS) had a statistically significant effect on educational output (EDUOUTPUT) at ($\beta = 0.233$, $t = 8.135$, $p < 0.05$). The significance of the results of the study is further supported by the effect size denoted by $f^2$ and the confidence intervals reported in Table 7.

**Discussion of Results**

Further explanations can be provided for the findings of the study. Several institutional factors contributed to the significant effect of institutional challenges on coping strategies and educational outcomes among distance education learners, as found by this study for hypotheses one and two. Factors contributing to the institutional challenges were infrastructure-related-suitability of classroom furniture, cleanliness of washroom facilities, module related challenges-typographical errors of modules, conciseness of modules, and unavailability of soft copies of modules or delay in supplying modules to students. Lastly, assessment-related challenges-delay feedback on continuous assessment, the tension in the exams hall created by invigilators and difficult assessment questions measured the institutional challenges. The results suggest that the inability of distance learners to obtain good grades and early completion of programmes could be contributed by these institutional challenges. Meanwhile, with effective coping strategies instituted by these distance learners, the impact of these challenges could be reduced. Thus, the findings of this study agree with that of Bampo (2008) and Osafo (2017) that module-related challenges affect the academic performance of distance learners. Segbenya and Peniana’s (2021) findings that assessment-related challenges influence distance learners’ satisfaction with academic programmes pursued is also upheld by the findings of this study.

Further explanations can be provided for the findings of the third hypothesis, which found that instructional challenges significantly influenced coping strategies among distance learners. The findings mean that instructional challenges remain one of the cardinal challenges that distance learners face in Ghana. These challenges include low motivation and competency-related challenges with tutors on the distance mode, alienation and separation from tutors/facilitators. Thus, the findings of Egenti and Omoruyi (2011) and Agbofa (2012) that distance learners face instructional challenges are further supported by this study’s results. Furthermore, the results have shown that with the right coping strategies in place by the distance learner, the instructional challenges could be reduced to enable him/her to perform well academically and to complete their academic programmes on time. Thus, the findings of Ohene and Essuman (2014) that appropriate coping mechanisms can reduce the impact of challenges on students’ academic performance is corroborated by the findings of this study. It also stands to conclude that lack of appropriate coping strategies could seriously aggravate the effect of the instructional challenges on the distance learner. These assertions further explained why instructional challenges significantly impacted educational output among distance education learners in Ghana, as captured in hypothesis four and supported by the findings of Mends-Brew and Asabre (2016).

The meaning of the significant relationship between psychological challenges with coping strategies and educational output, as captured in hypotheses five and six, needs further explanation. The results mean that psychological challenges can cause poor academic performance or delay the completion of academic programmes among distance learners in Ghana. The results further suggest that any percentage increase in factors causing stress to learners (such as multiple roles) will lead to the same percentage effect on students’ academic performance or delay their completion of academic programmes. This is because the demands of multiple roles on the distance learner could affect his/her psychological balance and the ability to concentrate on studies and perform well. The conflict between these multiple roles thus could easily affect the academic performance of the distance learner as was earlier found by Kwaah and Essilfie (2017). However, the effect of psychological challenges was not limited to distance learners’ academic performance but also their coping strategies as captured in hypothesis six. The results suggest that the lack of appropriate coping strategies for the distance learner could aggravate the propensity of the effect of psychological challenges on the distance learner. The potency of psychological challenges on the distance learner could therefore be ameliorated by effective coping strategies. Alternatively, appropriate counselling could also effectively address their psychological needs. Thus, the findings of this study agree with that of Harisson (2008) and Mamhute (2011), who found that psychological challenges affect the academic performance of students.

Socio-religious challenges were also found to have significantly influenced both coping strategies (hypothesis
seven) and the educational output of learners (hypothesis eight). The results mean that distance learners will have the challenge of completing their academic programmes if they want to attend all their socio-religious distastes. This is because socio-religious activities such as weddings, funerals, outdooring, and church services, mostly take place on weekends. Meanwhile, most of the face-to-face sessions for distance learners’ academic activities also occur during the same weekends. The decision to attend to these socio-religious regularly will surely affect the distance learners’ academic activities. Thus, the assertion of Harisson (2008) of the effect of socio-religious challenges on students was therefore upheld by this study. Failure to attend these socio-religious activities could also affect the respect and image of the distance learner in society. Thus, a socio-religious challenge is like a “two-edged sword” challenge facing the distance learner. Thus the distance learner needs an appropriate coping strategy to manage the dictates of social and religious demands on his or her academic pursuits. Thus, the distance learner can reduce the effect of socio-religious challenges on his/her ability to get good grades and complete academic programmes on time with the help of effective coping strategies. Grohman (2009) findings of the relevant on coping strategies for socio-religious challenges is further supported by the findings of this study.

The results that coping strategies significantly influenced educational output needs further explanation. The results suggest that distance learners in Ghana are active agents who are able to marshal strategies (coping) to confront challenges they face in pursuit of their academic goals. Thus, coping strategies used by distance learners have the potential to influence their ability to obtain good grades and complete their academic programmes on time (herein termed as educational output). The results agree with Segbenya et al. (2019) and Kwaah and Essilfie (2017) that coping strategies are very important for managing the stress associated with the distance mode of education. Thus this study found that distance learners used four main coping strategies that were effective in mitigating the impact of challenges on them. These were problem-focused, emotion-focused, preventive and proactive coping strategies. The results also mean that if distance learners fail to find appropriate coping strategies/ies to mitigate the impact of challenges they face during their academic pursuit, they stand to perform poorly academically and could delay completing their academic programmes (See appendix for details on coping strategies). The results, therefore, corroborate the findings of Schwarzer and Knoll (2007) that individuals and, in this case, students are dynamically motivated to devise coping strategies for their challenges.

### Practical implications for human resource managers

The results have several implications for human resource managers for both academic institutions offering distance programmes and the industry. Human resource (HR) managers at academic institutions are responsible for recruitment and training course facilitators/tutors for distance programmes and ensuring the availability of adequate and befitting facilities for the smooth running of the distance programmes.

Thus, human resource managers need to play a critical role in reducing institutional challenges faced by distance learners. HR managers can play a critical role in ensuring that conducive facilities that promote comfort for learning are hired/provided or built for face-to-face learning for distance learners. This is because most institutions in developing countries offering distance education depends on hired and franchised facilities of other non-tertiary institutions. Thus, these hired facilities come with inherent institutional challenges, including the suitability of furniture, and washrooms, among others, during a face-to-face session.

Furthermore, HR managers also have a role to play in addressing instructional challenges facing distance learners in Ghana. This is because the dominant mode of delivery in developing economies is still the face-to-face sessions which are confronted with commitment and competency-related challenges in terms of part-time facilitators hired to deliver academic content. Thus, human resource managers are to ensure that part-time facilitators hired are committed and competent for the successful delivery of course content in the face-to-face mode. Also, module related challenges have some implications for HR managers in that they need to ensure early or timely production and distribution of course modules to distance learners. HR managers will also need to ensure expert reviewers are in place to ensure that modules produced are free from typographical errors to facilitate easy understanding among learners.

The HR managers also have a role in reducing the effect of assessment-related challenges faced by distance learners. That is ensuring that examiners mark students’ scripts on time, give feedback on continuous assessment, and release students’ results on time. This role of HR managers is vital to ensure that students can prepare well for their examinations. This can further enhance students’ chances of obtaining good grades as well as increase student satisfaction. HR managers equally have a role in ensuring that competent external and internal invigilators are brought on board during an examination. This role of HR managers is necessary to create a conducive environment for an examination so that students can feel free to write their examinations. It is
expected that this could enhance distance learners’ chances of obtaining good grades and increase their satisfaction.

Another area of concern where HR managers need to play a critical role is an orientation of distance learners on the importance of coping strategies and counselling to reduce the impact of challenges on them. HR managers must recruit competent counsellors who will continue to provide academic and non-academic counselling to distance learners. It is expected that the right counselling will help distance learners to be able to device appropriate strategies to navigate their educational journey despite the several challenges that confront them on the distance mode.

The findings of this study also have implications for human resource managers who serve as employers of working distance learners. That is human resource managers have a role to play in reducing the burdens or challenges distance learners face whiles pursuing their further studies through the distance mode. This is because the industry and the organisations where distance learners work, stand to benefit from knowledge, competence and skills acquired through the further studies through the distance mode. This category of HR managers therefore will need to provide more time-offs (study leaves) for distance learners to be able to have enough time to travel to their study centres to participate in face-to-face sessions and examinations to be able to complete their academic programmes.

Additionally, HR managers who served as employers of distance learners could also provide online facility support to enable their workers on the distance programmes effectively participate in online learning. Online facilities required in this regards include online tools such as computers, tablets and laptops. Additional online support that employers or HR managers can provide to their workers on the distance mode could also include internet and internet data support. Counselling support provided by HR managers for their workers on the distance mode could also help these distance learners to be able to manage their time well. Good management of time by these distance learners will also help reduce work and life conflict among this category of distance learners.

**Theoretical implication**

The findings of this study have implications for the transactional coping theory that guides this study. The categories of challenges found by this study—institutional, instructional, and socio-religious—agree with the theory’s externalities or situational axiom. Additionally, the psychological challenges found in this study equally relate to the personality traits of individuals axiom of the theory. Thus, how individual characteristics and situational characteristics collectively influence individuals’ cognitive processes and how to appraise a situation grounded in the transactional coping theory is supported by the outcome of this study.

In terms of coping strategies recommended by the transaction coping theory—emotional-focused and problem-based focus coping strategies also relate to the findings of this study. This study found that the distance learner used four main coping strategies, with the problem-focused being first followed by the proactive coping strategies, the emotion-focused coping and lastly, the preventive coping strategy (See Table 8 in the Appendix). Meanwhile, the dominant usage of the problem-focused strategy among distance learners is really not the best though rated high. The usage of the problem-focused coping strategy means that distance learners did not blame others for their challenges but took the ‘bull by the horn’ and devised ways to handle the challenges. Thus, distance learners chose to ascertain the origin of their challenges and take steps to isolate the causes and devise means of resolving the problems one after another. Ideally, the proactive coping strategy should have been the dominant coping strategy. Proactive coping strategies, in this case, affords the distance learners to put in place a forearmed preparation for similar situations in the future and acquire related skills to estimate potential stressors before they actually occur.

**Conclusion and recommendation**

This study examined challenges and coping strategies among distance education learners and their implications for human resources managers. It can be concluded for this study that instructional challenges, psychological challenges, socio-religious challenges and institutional challenges had a statistically significant relationship with coping strategies and educational output among distance learners. Coping strategies also obtained a statistically significant relationship with educational output. The four main effective coping strategies identified among distance learners in this study were problem-focused, emotion-focused, preventive and proactive coping strategies. These conclusions call for specific action to be taken to address the identified challenges and their impact on distance learners.

Therefore, it is recommended that distance learners give more attention to the usage of proactive coping strategies instead of the problem-solving coping strategy in vogue. The proactive coping strategy will help distance learners to better put in place a forearmed preparation for similar situations in the future and acquire related skills to estimate potential stressors before they actually occur. Thus, orientation programmes provided by academic institutions and employers in this regard on coping strategies will be
very helpful in the attainment of this goal among distance learners.

It is also recommended that educational institutions should provide academic counsellors to distance learners. These counsellors will guide distance learners on how to manage their challenges alongside their academic pursuits. Due to the number of distance learners involved and their characteristics, face-to-face counselling could be supplemented with electronic or online counselling sessions to cover every distance learner to enable them to obtain good grades, complete their academic programmes on time, and enhance their satisfaction level for the distance education programme pursued.

Human resource managers should also provide decent and suitable teaching and learning facilities for face-to-face sessions. This can be done by ensuring that (in the short run) hired facilities (buildings, furniture, and washrooms) used for face-to-face sessions meets the standards required for university education. In the long run, managers of distance education programmes should construct their own structures suitable for university or higher distance education delivery requirements. It is also recommended that both print and soft versions of course modules/materials be made available to students so that students are not entirely disadvantaged by delays that come with the printing and distribution of modules at the beginning of the semester.

Another recommendation for reducing the impact of challenges faced by distance learners on their academic output is that the HR managers should hire competent and committed course facilitators. The need to continue to provide in-service training for these course tutors regularly to update their skills and teaching methodology is very much required. It is further recommended that HR managers provide a non-threatening and conducive environment for assessment. Providing timely feedback on assessment to distance learners will lead to higher academic performance and satisfaction with academic pursuit/programmes.

**Contribution to knowledge**

This study has established that instructional, institutional, psychological and socio-religious challenges faced by distance learners affect their academic performance and ability to complete their programmes on time. This study has established that it takes the collective efforts of both human resource managers and distance learners to overcome such challenges. This study further contribute to the existing literature by establishing that distance learners as active agents are able to devise strategies or coping mechanisms to overcome challenges associated with their academic pursuits.

**Limitations and future research directions**

This study was limited to distance learners in one country, which limited the generalisation of the findings of the study with circumspection. Thus, further studies could consider undertaking a similar study involving postgraduate facilitators and managers of distance education programmes in order to ascertain challenges associated with the provision of distance education in general. Future studies could also consider a qualitative or a mixed approach. Finally, the sample could be expanded to include other higher education institutions offering distance education models.

**Appendix**

**Coping strategies among distance learners in Ghana**

| s/n | Coping Mechanisms                                                                 | N  | Mean  | Std. Deviation |
|-----|----------------------------------------------------------------------------------|----|-------|----------------|
| 1   | I change for the better as the relationship with the environment change (Problem – Focused Coping) to enable me to cope with my challenges | 203| 2.7586| 0.72839       |
| 2   | I developed skills and strategies in pursuit of goals or in overcoming specific challenges (Proactive Coping) to enable to cope with my challenges | 203| 2.7586| 0.78087       |
| 3   | I change the way to attend to or interpret what is happening (Emotion-Focused Coping) to enable to cope with my challenges | 203| 2.6946| 0.71430       |
| 4   | I Make an effort to prepare for uncertain events in the future (Preventive Coping) to enable to cope with my challenges | 203| 2.6847| 0.74403       |

Source: Field survey (2021). Scale: 2.0–2.4 = low; 2.5–2.9 = high

**List of abbreviations**

- COPS: Coping Mechanisms
- CFA: Confirmatory Factor Analysis
- EDUOUTPUT: Educational Output
- HTMT: Heterotrait-Monotrait Ratio
- ICH: Instructional Challenges
- INSTCH: Institutional Challenges
- PSCCH: Psychological Challenges
- SRCH: Socio-Religious Challenges
- PLS-SEM: Partial Least Squares Structural Equation Modelling
- VIF: Variance Inflated Factor

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Authors’ contribution MS conceptualised the topic, wrote the methodology, and carried out the analysis, discussion, and conclusions of the study. FAA Wrote the introduction and literature review, carried out the references, and proofread the finale manuscript.

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Declarations

Competing interests The authors of this paper have no competing interests.

References

Agbofa, F. J. K. (2012). Challenges and prospects facing students of distance education in Ghanaian public universities: The case of University of Cape Coast Study Centre (Doctoral dissertation, University of Cape Coast).

Bampo, J. (2008). Students’ assessment of facilities and services available for distance teaching and learning in the University of Cape Coast. Unpublished Master’s thesis, University of Cape Coast, Cape Coast.

Creswell, J. W. (2009). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, S., & Publications, Thousand Oaks, CA.

Egenti, M., & Omoruyi, S. (2011). Challenges of women participation in continuing higher education programme: Implications for adult women counselling and education. Educational Journal of Counselling, 77(2), 110–129.

Eisenbarth, C. (2012). Does self-esteem moderate the relations among perceived stress, coping, and depression? College Student Journal, 46(1), 149–157.

Folkman, S. (2008). The case for positive emotions in the stress process. Anxiety, stress and coping, 21(1), 3–14.

Fricke, A. (2010). Supporting nurses’ mothers: Gender equity requires adequate lactation rooms. The Journal of Gender Race & Justice, 3(1), 1–2.

Grohman, R., & Lamm, W. T. (2009). Reasons for student non-attendance at lectures and tutorials by nursing mothers: An analysis. Investigations in University Teaching and Learning, 2(2), 40–51.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modelling (2nd ed.). Thousand Oaks: Sage.

Harisson, D. M. (2008). Tutorial attendance and student performance. Toronto: University of Toronto.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. Journal of the Academy of Marketing Science, 43(1), 115–135.

Koomson, A. K. (1998). Distance education as a strategy for training teachers in Ghana: Problems and prospects. Journal of the Institute of Education, 4(1), 59–68.

Krejcie, R. V., & Morgan, D. W. (1970). “Determining sample size for research activities” Measurement, E. P., Vol. 30, pp. 607–610, doi: 10.1177/001316447003000308.

Kwaah, C. Y., & Essilfie, G. (2017). Stress and coping strategies among distance education student at the University of Cape Coast, Ghana. Turkish Online Journal of Distance Education, 18(3), 120–134.

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal and coping. New York: Springer Publishing Company.

Mamhute, R. (2011). The challenges of pregnant and nursing adult learners: a case study of Morgenter teachers’ college. Stellenbosch: Stellenbosch University.

Mends-Brew, E., & Asabere, N. Y. (2016). The effectiveness of distance education in Ghana. Science Journal of Applied Mathematics and Statistics, 4(4), 159–167.

Mnyanyi, C. B., & Mbwette, T. S. (2009). Open and Distance Learning in Developing Countries: The Past, the Present, and the Future. Dares Salaam: Open University of Tanzania.

Ohene, J. B., & Essuman, S. B. (2014). Challenges faced by distance education students of the University of Education, Winneba: Implications for strategic planning. Journal of Education and Training, 1(2), 156–176.

Osafo, A. B. (2017). Challenges and coping strategies of student mothers of UCC College of Distance Education: The case of the Cape Coast Centre (Master’s dissertation, Institute for Educational Planning and Administration, University of Cape Coast).

Pant, D. (2014). Gender-Role Socialization, Stereotypes, Government Policies and Development. Psychology, Development and Social Policy in India (pp. 285–296). New Delhi: Springer.

Puhl, R., & Brownell, K. D. (2003). Ways of coping with obesity stigma: review and conceptual analysis. Eating Behaviors, 4(1), 53–78.

Reyagalalnetsa, T. F. (2015). Adjustment experiences and coping strategies of first-year students at the University of Limpopo (Turfloop Campus) (Doctoral dissertation, University of Limpopo).

Schwarzer, R. (2000). Manage stress at work through preventive and proactive coping. In E. A. Locke (Ed.), The Blackwell handbook of principles of organisational behaviour (pp. 342–355). Oxford: Blackwell Publishers Ltd.

Schwarzer, R., & Knoll, N. (2007). Positive coping: Mastering demands and searching for meaning. In S. J. Lopez, & C. R. Snyder (Eds.), Positive psychological assessment: A handbook of models and measures (pp. 393–409). Washington: DC: American Psychological Association.

Segbenya, M. (2012). Importance of employee retention for attainment of organisational goals in Ghana Commercial Bank, Kumasi (Master’s dissertation, University of Cape Coast).

Segbenya, M., Odouro, G. K. T., Peniana, & Ghansah, F. K. (2019). Proximity and choice of College of Distance Education (CoDE) of the University of Cape Coast for further studies. International Journal of Educational Management, 33(5), 1012–1034.

Segbenya, M., & Nyieku, I. E. (2021). Demographic determinants of job satisfaction among part-time academic staff of the College of Distance Education, University of Cape Coast. In Muniandy, G. Awabil, J. Kumar, R. Mandela, R. L. Afutu-Kotey & J. Muyaka (Eds). Handbook of Research on Distance Education in Ghana (pp. 1–25). Accra Ghana, Sub-Saharan African Publishers.

Segbenya, M., & Peniana, F. (2021). Graduates’ satisfaction with components of Distance Education programmes pursued with the University of Cape Coast. In Muniandy, G. Awabil, J. Kumar, R. Mandela, R. L. Afutu-Kotey & J. Muyaka (Eds). Handbook of Research on Distance Education in Ghana (pp. 1–25). Accra Ghana, Sub-Saharan African Publishers.

Upoalkpajor, J. N., & Upoalkpajor, C. B. (2020). The impact of COVID-19 on education in Ghana. Asian Journal of Education and Social Studies, 9(1), 23–33.

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