

Squirrels as Green Allies to Human Resource Development Agenda on Pro-environmental Practices as the Fangs of Climate Change Rages on

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ABSTRACT

Through a process known as "zoochory, scatter hoarding, or caching", a squirrel gathers approximately about 10,000 nuts during the autumn season and have them kept underground. With 95% possibility that the exact location where the seeds are concealed will be forgotten. As a result of its forgetfulness, squirrels often repeat these activities unending. These seeds which have been forgotten by the squirrels, sprouts and successively become a woodland regeneration with green trees that protects the natural environment which continuously renews the ecosystem. Hence, squirrels can be labelled as "green allies to the agenda of human resource development (HRD) scholars/practitioners", as both utilizes its capabilities in advancing pro-environmental practices among humans across different sectors and industries as well as the larger society. In addition, collaborating with researchers from other fields (e.g. environmental sciences, business management, and varied social sciences, etc.), will propel HRD scholars to deploy the behavioral component of squirrels in promoting eco-friendly practices among the workforce in organizations, including the wider society. The connection between squirrels' green attitude and HRD's initiatives on pro-green practices, reveals a mutualistic interaction between squirrels and HRD scholars/practitioners' expertise on ecofriendly practices. With the discussions provided on the symbiotic relationship between squirrels' pro-environmental behaviors and HRDs expertise for promoting green practices, the research question was answered. Finally, using the three steps (unfreeze-change-refreeze) of Lewin's change theory which is acknowledged as an HRD change mechanism, a research framework was developed, along with providing directions for cross-disciplinary research and theory advancement and building

KEYWORDS : Squirrels, human resource development, pro-environmental behavior and attitude, green organizations, ecofriendly workforce, climate change, Lewin's change theory



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INTRODUCTION

Studies have revealed that through its pro-environmental behaviors, squirrels of different species make significant impact in ensuring that the ecosystem and its environment are well-protected for

healthiness of humans, animals, and other organisms (Goheen & Swihart, 2003; Steele et al., 1996; Steele & Yi, 2020). With environmental researchers disclosing that about 30% or more of the trees in the forests were either planted or regenerated through the handiwork of squirrels (Goheen & Swihart, 2003). Similarly, the findings from a research conducted in the University of Richmond in the United States, disclosed that squirrels through their ecofriendly behavior of hiding healthy nuts, are cornerstones considered very necessary for restoring a large section of green vegetations of oak forests located in countries which are domiciled in North America (Amant, 2022; UR, 1998). As these are mainly squirrels of the gray, red, and fox species (Boone et al., 2017; Goheen & Swihart, 2003; Steele et al., 1996). As a result of the need to store nuts which it needs to consume in the future, squirrels knowingly or unknowingly bury these seeds at various underground locations (Vander Wall, 1990; Vander Wall, 2001). With about 95% chances that the seeds kept beneath the ground will never be retrieved due to squirrels' short memory span and attitude of absentmindedness (Rafferty, 2022; UR, 1998). However, within a short-while, these nuts develop into giant green trees, shrubs, and plants which protects the environment and its ecological community in several ways, while also being a formidable force against the ravaging effects from climate change. For example, to show gratitude on the efforts they make in conserving the environment and nature, the North Carolina State in the United States in 2001 officially declared every January 21 as Squirrels Appreciation Day (Burdick, 2010; Sen, 2024). This was made possible by a Wildlife enthusiast named Christy Hargrove, whose activities on reforestation were aligned with that of North Carolina Nature Center (Burdick, 2010; Sen, 2024).

There are arguments in the literature that squirrels intentionally or accidentally embarks on this ecofriendly practice (Goheen & Swihart, 2003; Newediuk & Hare, 2020; Vander Wall, 1990). With inconsistency in the literature stating that squirrels oftentimes have an excellent memory of the locations they had nuts hidden underground, in addition to being sometimes forgetful (Bryce, 2023; Jacobs & Liman, 1991). That being said, the purpose of this article is not to affirm if squirrels remember or not where they had the nuts concealed underground, or deliberately or unconsciously engages in ecofriendly practices, but to reveal the significance of their green behavior as it relates to the agenda of human resource development (HRD) in the battle against climate change and global warming. With the green capabilities of squirrels interweaved into the expertise of HRD scholars and practitioners. As this scholarly interconnection is found to lack presence in HRD literature. With the green trees which developed from the hidden nuts, oxygen is emitted through photosynthesis, as the trees are responsible for eliminating climate-warming carbonic acid from the ecosystem (Boone et al., 2017; Steele & Yi, 2020). Which is capable of easing the outcome from climate change; such as a change in the pattern of rainfalls which results in incessant flood, an increment in vaporization, and a continuous rise in sea levels including fast and furious hurricanes, tornadoes, and cyclones arising from warmer oceans. An image is presented showing a squirrel making attempt to tuck away nuts below the surface of the earth.



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The pro-environmental mindset of squirrels indicates that through a collaboration with the field of HRD, the lifecycles of these bushy tailed animals can be integrated into the research and teaching components of Education for Sustainable Development (ESD). As UNESCO (United Nations Educational, Scientific and Cultural Organization) and United Nations Sustainable Development Goal (UN-SDG) 13 on Climate Action, defined ESD as the ability for humans to gain skills, competencies, abilities, expertise, behaviors, and attitudes which are important for shaping a future that is ecofriendly in values, mindset, outlook, and philosophy (Filho et al., 2023; UNESCO, 2020).

Human resource development (HRD) has over the past years being identified for its aspiration and ambitious goals, which has helped to reshape the performance and efficiency of workforce and organizations using various effective strategies. In particular are training and development for reforming knowledge and skills in order to enhance abilities (Byrd, 2024; Garavan et al., 2001; Garavan et al., 2016; Mohd Rasdi et al., 2022), and talent development for reshaping workforce current and future capabilities to deliver on organizational goals and objectives (Garavan et al., 2023a; Osolase et al., 2024). Included is career development which is highly influenced by the efforts from training and talent development (McLagan, 1989; Mohd Rasdi & Krauss, 2019; Mohd Rasdi et al., 2022; Werner, 2015), along with organizational and societal development for the general well-being of the workforce, humans, its environment, and all other species (Cseh & Crocco, 2020; Garavan & McGuire, 2010; Wang, 2012). With its proactive expertise in providing solutions for resolving complex problems (e.g. climate change) (Lee et al., 2024), there is the urgent need for HRD researchers in conjunction with its practitioners, to design learning and development programs which are capable in ensuring that the organizational objectives of businesses and its workforce are in accordance with the green behaviors of squirrels. As the perpetual habits of squirrels in excavating the soil to hide nuts which later metamorphoses into green trees (Boone et al., 2017; Yi et al., 2012), can be utilized as teachable moments for leaders, organizations, and the workforce to learn and gain new insights on acquiring ecofriendly knowledge and skillsets.

For example, the Lewin's organizational change theory with three stages (unfreeze-change-refreeze) is widely acknowledged as a catalyst utilized by HRD scholars and practitioners for bringing about impactful change among workforce and organizations (Memon et al., 2021; Muchira & Kiambati, 2015). With training and development helping to unfreeze the change process by promoting awareness and developing the required knowledge and skills for ecofriendly practices. Similarly, in using training

and development for re-education in order to transform the talents and careers of the workforce, there is assurance that green practices derived from squirrels' pro-environmental capabilities can be integrated into employees' knowledge, competencies, values, ethics, morals, attitudes, and behaviors. Refreezing as the final stage of the change process, ensures that the change achieved becomes an established culture and practice in the organization (Burnes, 2019; Stanz et al., 2022). As a result of this, organizational development (OD) approaches as a norm which HRD uses for pioneering change, can be deployed to refreeze green attitudes of squirrels so as to institutionalize pro-environmental practices as business or company culture.

Considering that to have an in-depth knowledge on the behaviors of squirrels is mainly the duty of Ethologists which is a sub-field of Zoology (Korschgen, 1981; Vander Wall, 2001), a partnership will be required between HRD and the Ethology discipline. As the capability of Ethologists to decipher the green behaviors, attitude, and values of squirrels, will ensure that HRD scholars along with its collaborators from other fields (e.g. environmental sciences and business management) understand and interpret the entire scenario and have them integrated into the training and development components of businesses.

Furthermore, this could help to recreate the teaching modules on climate change and innovative strategies in mitigating its effects across diverse disciplines. Afterall, if animal species in the category of squirrels can naturally promote and practicalize the "go green initiatives", then humans which are considered higher animals with greater intelligence and capabilities, have no option than to key-into the pro-environmental agenda. Which could perhaps be termed "the squirrel effect on ecofriendly practices to mitigate against the ravages from climate change." As humans can borrow learning and initiatives from animals to foster prosperity and well-being in all sphere of life (Johnson, 2023; Nawroth et al., 2021).

The number of trees being felled each year globally, has been affirmed to be around 15.3 billion (Ritchie, 2021; Worland, 2015). With deforestation leading to the constant emission of carbons and greenhouses gases which are stored within the wood and soil of trees, there is bound to be climate change. Additionally, deforestation has been identified as causing landslides, as soil strength is reduced and become vulnerable to waterlogging because of its inability to absorb or retain enormous amount of water (Manchado et al., 2022). This has made the Food and Agriculture Organization (FAO), an organ of the United Nations (UN), to raise the alarm that people and organizations across societies and countries needs to accelerate the planting of trees to replace those which have been cut down, while also reducing deforestation practices (FAO, 2020). Furthermore, a millennium ago, about half (i.e. 47%) of the landmass of France was covered with trees and forests, which has however been reduced to below 31.4% as at 2021 (Ritchie, 2021). Equally, this has been replicated in the United States of America (USA), as the volume of its trees and forests in around the year 1630 were up to 46%, but currently lower than 34% of its land area (Ritchie, 2021). As disclosed by Ritchie (2021), around the year 1021, trees and forests which occupied the landmass of Scotland was up to 20%, but deforestation has reduced it to 4%. With 46% of trees consumed and forests reduced over a thousand years globally (Worland, 2015). Of recent across the global media, the death toll of about 217 people was recorded in Spain, which was ascribed to flooding that is linked to deforestation, climate change, and global warming (Otto, 2024; WWA, 2024).

As scholars of HRD have posited, innovative research from multi-disciplinary perspectives needs to be conducted, as the outcome is capable of bringing forth lasting solutions needed to tackle complex problems (Garavan & McGuire, 2010; Lee et al., 2024; McGuire & Nachmias, 2023), namely droughts, floods, hunger, and seismic waves (i.e. increment in rising sea levels because of the strain on tectonic faults) which are engineered by climate change. Predicated upon the role of HRD in bringing about pro-

environmental practices among the populace including workforce across businesses, these HRD researchers and practitioners introduced the term “green human resource development (GHRD)” practices. Implying that using its expertise, HRD scholars and practitioners could strategically contribute to the paradigm shift from conventional organizational practices to a culture which propagates environmental sustainability and green initiatives through pro-green activities (Lee et al., 2024; McGuire, 2010; Osolase et al., 2023; Piwowar-Sulej, 2022; Sadler-Smith, 2015; Scully-Russ, 2015; Valentin, 2015).

Using the natural green instincts of squirrels, HRD scholars and practitioners in partnership with other disciplines whose goals are aimed at protecting the environment and its limited natural resources, could develop green research plans which establishes a pathway for organizations, practitioners, policymakers, public and privately administered agencies, and national/international organizations to make tremendous contributions which decreases the ability for climate change to cause more damages. Incorporating the food storage pattern of squirrels into climate change and environmental sustainability education (e.g. learning and development programs), will enable the broadening of perspectives across different fields, as it also provides an opportunity for all stakeholders to gain comprehensive learning and understanding on the lifestyles of squirrels, and how it could advance the acquisition of green abilities and competencies. For instance, squirrels’ loyalty to nuts and its ability to effortlessly distribute it within the neighborhood and far into the forests, has become a strategy for replacing the millions of trees being cut down annually by humans, as the growth of these trees preserves the environment through reduction in climate change crisis (Newediuk & Hare, 2020; Steele & Yi, 2020). Squirrels should therefore not be seen as a threat or problem to human existence, but instead, a part of a functioning interconnecting web of network whose cognitive abilities has resulted in the advancement of ecofriendly practices.

Considering that HRD using its expertise, is well-grounded in transforming people and systems (e.g. people development and management, decision making process, and research and development, etc.) (Byrd, 2024; Cseh & Crocco, 2020; Mohd Rasdi & Krauss, 2019), it is therefore essential that its scholars and practitioners’ partner with other fields with similar interests in addressing the various problems linked to climate change. On this basis, researching about the behavioral patterns of squirrels pertaining to pro-environmental practices, is a necessity for HRD to keep on with interdisciplinary research which promotes ecofriendly practices among the workforce, organizations, and the society at large. Hence, to achieve its aim, apart from employing a narrative approach after reviewing several literatures which are aligned to the article’s objective, a single research question was also developed. The secondary data which the authors utilized provided an opportunity to evaluate various literatures from several academic and non-academic platforms, thereby answering the research question (Sukhera, 2022). Resulting in the researchers’ ability to explain the core essence and positive impact of the topic under discussion. Such as the connection between squirrels’ green behavior and HRD’s agenda on advancing ecofriendly practices, which are strategies for confronting the damages which recurrently emanates from climate change. Additionally, is the need for multidisciplinary research and theory building between HRD and other like-minded researchers and practitioners..

RESEARCH QUESTION

1. Research Question: How does the green behaviors of squirrels’ impact HRD’s agenda on pro-environmental practices in the age of climate change?

- A. Symbiotic Relationship Between Squirrels Ecofriendly Behavior and HRDs Expertise for Promoting Pro-Environmental Practices

Squirrels are recognized as passionate scavengers and affirmed as preserving its natural ecofriendly skills over ages past to present (Amant, 2022; Campbell, 2024). It is reasonable to affirm that HRD using its functions from the viewpoints of Lewin's change theory, could perhaps learn from squirrels' green habits or actions, as the knowledge gained could be used in promoting and enhancing green practices among workforce and businesses across multiple sectors and industries. Training and development could possibly be deployed for unfreezing so as to promote awareness on how squirrels' pro-environmental demeanors could impact the workforce. In the same manner, talent development and career development could be rejigged through re-education which focuses on how squirrels' ecofriendly deeds have over centuries brought succor to forests, habitats, biosphere, including the natural environment and its scarce resources. Which could potentially lead to a change of behaviors and culture that supports green practices among employees and organizations. Because organizational development is the summation of various HRD practices (Cseh & Crocco, 2020; Mohd Rasdi et al., 2022), it could be deployed in refreezing to stabilize the change in workforce behaviors and attitudes, along with organizational systems and corporate culture. Signifying that a mutually beneficial relationship exists between squirrels' green behaviors and HRDs goals on promoting ecofriendly practices which reduces the impacts from climate change and global warming. Apart from such an attempt helping to establish ecofriendly business strategies focused on saving the trees, forests reserves, and the natural environment and its limited resources, there is also the possibility for a green culture to be fully ingrained in organizational systems. In addition to revealing squirrels as green allies to HRDs pro-environmental agenda on the battle against climate change crisis for a greener economy.

Training and Development: It is explained as a network of systems which HRD deploys in improving the education, skillsets, knowledge, and capabilities of the workforce (Anderson et al., 2024; Harney & Gubbins, 2024; Swanson & Holton, 2001). With training and development, learning and development activities is enhanced in order for organizations to enhance the performance and efficiency of the workforce for achieving its long- and short-term plans. Based on this direction, HRD could therefore reevaluate the learning components of its training and development programs to go along with the innate green behaviors of squirrels. Which could possibly result in developing pro-environmental knowledge and abilities for the workforce. According to McGuire (2010), Osolase et al. (2023), Sadler-Smith (2015), and Scully-Russ (2015), as the global community which comprises of organizations and its workforce encounters the ferocious fangs of climate change, the expertise of HRD (e.g. training and development) remains an agent of change for advocating a culture that is pro-green. In the first step of Lewin's change theory, this is regarded as unfreezing (Burnes, 2019). As employees who acquire pro-environmental awareness including knowledge and abilities, will most likely impact the organizations culture with their green capabilities (Piwowar-Sulej, 2022). Green abilities in this category could focus on digitalizing the operations and services of organizations, as this brings about paperless systems which reduces the cutting down of trees needed to produce paper products. As well as being able to minimize the use of water required during production and manufacturing processes.

For example, in their studies, Lee et al. (2024) maintained that because of the effects from climate change, the onus to train the workforce to embrace green technologies for operationalizing paperless systems rest on the shoulders of HRD scholars and its practitioners. Because apart from decreasing ecological footprints, green technologies such as electronic signatures, cloud storage, scanning apps, computers, digital finance tools, and managing office documents, are also an avenue through which there is reduction on paper use and safeguarding the trees in the forests. As a result of training and development, awareness on the significance of tree planting as a proactive approach to mitigating against climate change could be developed among the workforce across sectors and industries.

Talent Development: It is an HRD strategy which organizations deploy to help the workforce reach their highest potentials, which is needed to ensure that business objectives are made sacrosanct (Garavan et al., 2023a). However, talent development does not solely focus on developing workforce knowledge to redefine their capabilities, as organizations also design systems which utilizes this HRD tool for recruiting people whose knowledge and abilities aligns with its vision (Garavan et al., 2023a; Osolase et al., 2024). Garavan et al. (2023a) revealed that with talent development approaches, businesses can incorporate innovative ideas into its recruitment exercises, ensuring that persons who are equipped with the required knowledge needed to deliver on organizations mandate are employed. Similarly, there is a disclosure by Bratton (2018), Garavan et al. (2023b), and Osolase et al. (2023), that applicants whose educational or professional background corresponds with ecofriendly practices could be recruited, and training and development deployed to further enhance their green talents which brings about organizational change and development. Be that as it may, to position its goals and objectives for countering problems associated with climate change, individuals whose knowledge and capabilities (e.g. aptitude and artistry) allies with the inherent green abilities of squirrels, could perhaps be positioned and given opportunity to prove their worth during recruitment exercises. It is a strategy wherein the green intellectual robustness of squirrels can be integrated into the day-to-day operations of organizations.

Career Development: High-performing organizations often seek the expertise of HRD, with the intention to continuously improve and develop workforce careers for organizational efficiency (McLagan, 1989). It is a mutually beneficial cooperation allowing organizations and employees to achieve their desired goals on professional growth and business efficiency. However, for change to occur and as argued by McLagan (1989), Mohd Rasdi et al. (2022), and Valentin (2015), the ability for organizations to successfully utilize the expertise of HRD in developing the careers of the workforce, is highly dependent on how effective its training and development programs. As excellent learning and development programs which are derived from training and development, are chiefly shaped to improve employees learning experiences through enhanced knowledge and education. This implies that the more the workforce is exposed to quality learning and knowledge development, the more their careers are patterned towards self-fulfillment, satisfaction, and organizational performance. Therefore, technically, training and development is a requisite for businesses which has the intention to have the green abilities of squirrels incorporated into the careers of the human resources. Which is mainly because employees will develop green capabilities through the organizations continued green learning and development activities.

Organizational Development for Change in Culture and Systems: Organizational development also recognized as OD is not a single stratum, as it consists of various layers which organizations deploy to achieve performance (McLagan, 1989; Torraco & Lundgren, 2020). These reformist elements which can be applied for organizational development in this regard are training and development, career development, and improving existing systems like HR (human resource) policies (Arifin et al., 2024; Mohd Rasdi et al., 2022). As the final step of Lewin's change theory which focuses on unfreezing (Stanz et al., 2022), OD mechanisms could be applied for stabilizing the transformation achieved using training and development, talent development, and career development during the phases of unfreeze and change. While training and development is expected to improve workforce knowledge on desired objectives which is pro-environmental practices, career development is structured to enhance employees' effectiveness, which invariably ensures that the short- and long-term targets or pursuits of the organization pertaining to ecofriendly activities is attained. Regardless, the purpose of HR strategies is to make policies which fully supports the ambition of the organization to green practices with respect to its

workforce, culture, and values. Garavan et al. (2023b) and Piwowar-Sulej (2022) stated that an efficient approach which organizations could adopt to transition to pro-environmental practices as climate changes rages on, is by reorganizing its policies in the HR department. Which is because HR personnel holds the key which influences change in businesses. As it could also provide guidelines in the form of awareness for employees on behaviors which are acceptable in the organization, as such attitude must be found to be friendly to the environment and the limited resources which make up the ecosystem.

In using paperless systems which conveys the non-acceptance of papers which are manufactured from trees, along with digitalizing pay-slips and other papered documents, it is via these policies that a green business plan can be developed, as the model emanating from squirrels' ecofriendly behaviors, attitudes, values, and abilities, are integrated into all functional systems and apparatus of the organization. Additionally, policies which emerges from HR units should be designed to positively impact organizations learning and talent development programs, through recruiting workforce whose intellection can influence organizational development structures to key into the agenda of environmentalism. Managers and supervisors should also provide exemplary leadership, by being holding themselves and employees accountable to the organization's green policies, and not only focus on giving instructions. In Figure 1, the theoretical framework reveals how the three steps of Lewin's theory provides comprehensive understanding for application of the green traits and abilities of squirrels through HRD practices which is capable of greening the workforce and organizations.

Kurt Lewin's 3 Step Change Theory

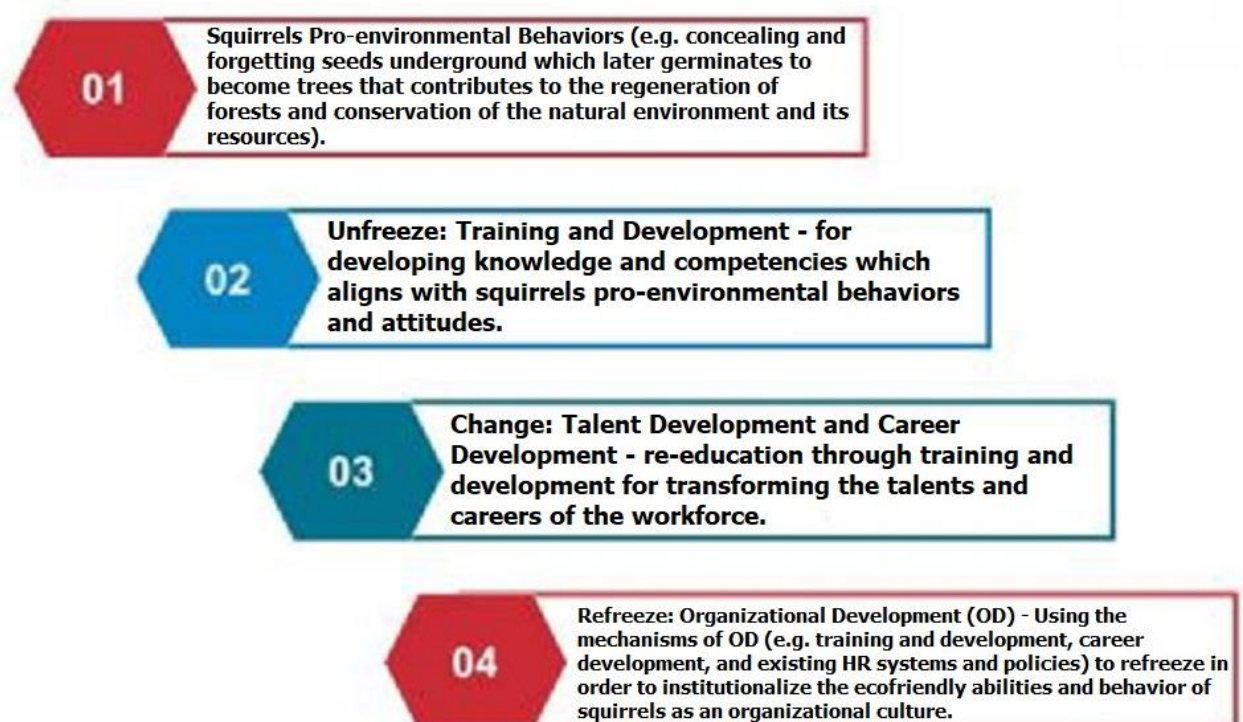


Figure 1. Study's Theoretical Framework

CROSS-DISCIPLINARY RESEARCH INCLUDING THEORY ADVANCEMENT AND BUILDING

To achieve its aim through the application of its various activities as discussed, HRD scholars could collaborate with researchers from other disciplines. Example being from environmental sciences, zoology, business and management sciences, etc. Which is because cross-disciplinary research which draws ideas from other fields, is believed to be beneficial for providing broad understanding on the impact which HRD expertise could contribute towards enhancing workforce and organizations green capabilities. With the green traits of squirrels being practically useful for achieving HRD agenda on climate change initiatives. Byrd (2024), Garavan and McGuire (2010), Sadler-Smith (2015), Torraco and Lundgren (2020), alongside Valentin (2015), declared that interdisciplinary studies in HRD have become necessary for resolving twenty-first century problems (e.g. COVID-19 pandemic and climate change dilemma), as it creates a platform with divergent perspectives. As HRD scholars and practitioners are persuaded to adopt creative methods in challenging unsurmountable questions which seems problematic to fields which do not embrace cross-disciplinary thoughts (Byrd, 2023; Wang, 2012). The outcome from the research should be able to distill by extracting the essential characteristics of the behavioral patterns of squirrels, and the impact which it has made on the environment towards reducing climate change effects. With HRD scholars being at the forefront and closely partnering with its practitioners as well as researchers and professionals from other disciplines, promotion of green practices using squirrels as a symbol or emblem, will turn out to be the oxygen for energizing the academic community to proffer solutions to problems which evolved from climate change crisis. However, this endeavor cannot be achieved without efforts made at advancing and building theories across an interdisciplinary framework.

Based on communication from HRD scholars such as Byrd (2023; 2024) and Lynham (2000), as the world community experiences myriads of problems (e.g. climate change and global warming), researchers across HRD discipline should develop a strong network that goes beyond the field. As gaining well-grounded knowledge outside of the HRD discipline is indispensable for making contributions that are capable of resolving complex issues like climate change and global warming. As experts from a field whose scholarly works, practice, and research output are multidimensional in perspectives, recognizing the intellection of other fields is mandatory for theory building in an era of climate emergency and global heating. In addition, advancing existing theories such as that of Lewin's 3-steps inherent in the HRD literature, or having to develop new theories from a cross-disciplinary approach, will manifest the ability for developing interdisciplinary concepts, analysis, constructs, and variables (Byrd, 2024; Lynham, 2000). This may perhaps be able to facilitate logical and sound reasoning, which is expected to provide instructions to the academic community and practitioners who are enthusiastic on utilizing the green personality of squirrels in confronting the hazards from climate change occurrences. Hence, the ability to maximize collaborative opportunities as they arise, or those pre-existing, will result in a sustainable and greener future for all.

CONCLUSION

It is obvious from the literatures reviewed, that the ecofriendly qualities and capabilities of squirrels have the potentials towards making significant contributions which is capable of reducing the dangers posed by climate change. As forest dwellers who also abode in urban environments, and propagating green practices using its innate knowledge for distribution of seedlings which later develop into trees, squirrels are relevant models for HRD scholars and practitioners to promote pro-environmental practices. Precisely, the development of cross-disciplinary research and practice with other like-minded researchers and professionals, will ensure that training and development, talent development, career development, as well as organizational development are redesigned to soothe the interest of the workforce and organizations on green practices. In addition to that of other disciplines and practitioners and the

wider society. Furthermore, the relationship between an HR department and the aforementioned HRD functions is mutually beneficial, as the specificity is to integrate the ecofriendly lifecycle of squirrels into the behaviors and mindsets of the workforce, including organizational and business culture. As this is capable of making tremendous input and contribution into minimizing the furious fangs of climate change which has continued to rage on over the past years.

REFERENCES

- A. Amant, (2022, January 20). "Celebrating Squirrels, the Ecosystem's Greatest Gardeners," *University of Wisconsin School of Veterinary Medicine*, 2022, <https://www.vetmed.wisc.edu/celebrating-squirrels/>
- V. Anderson, R. Poell, and R. Mohd Rasdi, "Theorizing Cultural HRD: An Emancipatory Structures Approach," *Human Resource Development International*, vol. 27, no. 5, pp. 1-13, 2024.
- M. Aiman Arifin, R. Razali, and U. Athilia Kamal, "From Global to Regional Perspective: Unveiling Asia's Human Resource Development Trends Through Bibliometric Lenses," *Cogent Business & Management*, vol. 11, no. 1, pp. 1-23, 2024.
- W. W. Boone, R. A. McCleery, and B. E. Reichert, "Fox Squirrel Response to Forest Restoration Treatments in Longleaf Pine," *Journal of Mammalogy*, vol. 98, no. 6, pp. 1594-1603, 2017.
- A. Bratton, "The Role of Talent Development in Environmentally Sustainable Hospitality: A Case Study of a Scottish National Health Service Conference Centre," *Worldwide Hospitality and Tourism Themes*, vol. 10, no. 1, pp. 69-85, 2018.
- E. Bryce, "Do Squirrels Remember Where They Buried Their Nuts? 2023, <https://www.scientificamerican.com/article/do-squirrels-remember-where-they-buried-their-nuts/>
- D. Burdick, "Squirrel Appreciation Day is January 21: Are you Ready? *Huff Post*, 2010, https://www.huffpost.com/entry/squirrel-appreciation-day_n_159626
- B. Burnes, "The Origins of Lewin's Three-step Model of Change," *The Journal of Applied Behavioral Science*, vol. 56, no. 1, pp. 32-59, 2019.
- M. Y. Byrd, "HRD Practice: Who is Doing the Work," *Advances in Developing Human Resources*, vol. 25, no. 1, pp. 3-4, 2023.
- M. Y. Byrd, "Advancing Theory in Human Resource Development," *Advances in Developing Human Resources*, vol. 26, no. 4, pp. 131-133, 2024.
- P. Campbell, "Bowie Wildlife Control: Squirrels in our Ecosystem, their Impact and why it Matters," *Skedaddle Human Wildlife Control*, 2024, <https://www.skedaddlewildlife.com/location/prince-georges-md/blog/squirrels-in-our-ecosystem-their-impact-and-why-it-matters/>
- M. Cseh, "Globalizing HRD Academic Practice: Developing a Global Mindset for Teaching and Research," *Advances in Developing Human Resources*, vol. 22, no. 1, pp. 57-71, 2020.
- W. Leal Filho, T. Wall, A. Lange Salvia, M. Alzira Pimenta Dinis, and M. Mifsud, "The Central Role of Climate Action in Achieving the United Nations' Sustainable Development Goals," *Scientific Reports*, vol. 13, pp. 1-7, 2023.
- Food and Agriculture Organization, "Global Forest Resources Assessment 2020: Key Findings," 2020, <https://doi.org/10.4060/ca8753en>

- T. Garavan, C. Mackenzie, and C. Darcy, "In the War for Talent: Just who is Worthy of Development? Talent Development in Organizations," "Smart Talent Management: Managing People as Knowledge Assets," *Edward Elgar Publishing*, pp. 46-66, 2023a.
- T. N. Garavan, and D. McGuire, "Human Resource Development and Society: Human Resource Development's Role in Embedding Corporate Social Responsibility, Sustainability, and Ethics in Organizations," *Advances in Developing Human Resources*, vol. 12, no. 5, pp. 487-507, 2010.
- T. N. Garavan, M. Mosley, P. Gunnigle, and E. Collins, "Human Capital Accumulation: The Role of Human Resource Development," *Journal of European Industrial Training*, vol. 25, no. 2/3/4, pp. 48-68, 2001.
- T. N. Garavan, H. Neeliah, R. Auckloo, and R. Ragavan, "Human Resource Development in Mauritius: Context, Challenges and Opportunities," *European Journal of Training and Development*, vol. 40, no. 4, pp. 210-214, 2016.
- T. Garavan, I. Ullah, F. O'Brien, C. Darcy, W. Wisetsri, G. Afshan, and Y. Hayat Mughal, "Employee Perceptions of Individual Green HRM Practices and Voluntary Green Work Behaviour: A Signaling Theory Perspective," *Asia Pacific Journal of Human Resources*, vol. 61, no. 1, pp. 32-56, 2023b.
- J. R. Goheen, and R. K. Swihart, "Food-hoarding Behavior of Gray Squirrels and North American Red Squirrels in the Central Hardwoods Region: Implications for Forest Regeneration," *Canadian Journal of Zoology*, vol. 81, pp. 1636-1639, 2003.
- B. Harney, and C. Gubbins, "Human Resource Development (HRD) Meets Human Resource Management (HRM): A Skills-based Agenda for a Fragile World Order," *Advances in Developing Human Resources*, vol. 26, no. 4, pp. 160-178, 2024.
- L. F. Jacobs, and E. R. Liman, "Grey Squirrels Remember the Locations of Buried Nuts," *Animal Behaviour*, vol. 41, no. 1, pp. 103-110, 1991.
- E. A. Johnson, "How Animals Affect us: Examining the Relationship Between Human-animal Interactions and Human Well-being, A Dissertation Submitted in Partial Fulfillment of the Requirements for the Doctor of Philosophy in Anthropology, 2023, <https://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?article=5722&context=thesesdissertations>
- L. J. Korschgen, "Foods of Fox and Gray Squirrels in Missouri," *The Journal of Wildlife Management*, vol. 45, pp. 260-266, 1981.
- S. Lee, S-H. Han, and J. Oh, "Sustainability Within the HRD Field: A Systematic Review," *New Horizons in Adult Education and Human Resource Development*, vol. 36, no. 2, pp. 127-146, 2024.
- S. A. Lynham, "Theory Building in the Human Resource Development Profession," *Human Resource Development Quarterly*, vol. 11, no. 2, pp. 159-178, 2000.
- A. Munoz-Torrero Manchado, J. Antonio Ballesteros-Canovas, S. Allen, and M. Stoffel, "Deforestation Controls Landslide Susceptibility in Far-western Nepal," *Catena*, vol. 219, pp. 1-11, 2022.
- D. McGuire, "Engaging Organizations in Environmental Change: A Greenprint for Action," *Advances in Developing Human Resources*, vol. 12, no. 5, pp. 508-523, 2010.
- D. McGuire, and S. Nachmias, "HRD: Truth, Linguistic Warfare and Positionality," *Human Resource Development International*, vol. 26, no. 4, pp. 353-355, 2023.
- P. McLagan, "Models for HRD Practice," *Training and Development Journal*, vol. 41, no. 9, pp. 49-59, 1989.
- F. Akmal Memon, S. Shafaq Shah, and U. Khoso, "Improving Employee's Engagement in Change: Re-assessing Kurt Lewin's Model," *City University Research Journal*, vol. 11, no. 1, pp. 144-165, 2021.

- R. Mohd Rasdi, and S. Eric Krauss, "Human Resource Development in Malaysia: Youth and Adult Strategic Partnerships," *Penerbit UPM, Universiti Putra Malaysia Press*, 2019.
- R. Mohd Rasdi, S. Eric Krauss, and A. Bakr Mohamed Razali, "Introduction to the Special Issue," *European Journal of Training and Development*, vol. 46, no. 3/4, pp. 281-284, 2022.
- T. Njoki Muchira, and K. Kiambati, "The Role of Human Resource Development as a Change Agent," *Educational Journal*, vol. 4, no. 5, pp. 214-221, 2015.
- C. Nawroth, L. Baciadonna, and N. J. Emery, "Editorial: Humans in an Animal's World: How Non-human Animals Perceive and Interact with Humans," *Frontiers in Psychology*, vol. 12, pp. 1-4, 2021.
- L. J. Newediuk, and J. F. Hare, "Burrowing Richardson's Ground Squirrels Affect Plant Seedling Assemblages via Environmental but not Seed Bank Changes," *Current Zoology*, vol. 66, no. 3, pp. 219-226, 2020.
- O. Ehikioya Hilary, R. Mohd Rasdi, and Z. Dato' Mansor, "Developing Awareness of Green Human Resource Development Practices," *Advances in Developing Human Resources*, vol. 25, no. 2, pp. 116-122, 2023.
- O. Ehikioya Hilary, R. Mohd Rasdi, and Z. Dato' Mansor, "Talent Development Versus Talent Management: Unblurring the Lines for Workforce and Organizational Performance," *Advances in Developing Human Resources*, vol. 26, no. 1, pp. 48-55, 2024.
- F. Otto, "Why did so Many die in Spain? Because Europe still hasn't Accepted the Realities of Extreme Weather," *The Guardian Online Newspaper*, 2024, <https://www.theguardian.com/commentis-free/2024/nov/04/spain-deaths-europe-realities-extreme-weather-flooding>
- K. Piwowar-Sulej, "Environmental Strategies and Human Resource Development Consistency: Research in the Manufacturing Industry," *Journal of Cleaner Production*, vol. 330, pp. 1-10, 2022.
- J. P. Rafferty, "Is it True that Squirrels Forget Where They Bury About Half of Their Food? *Encyclopedia Britannica*, 2022, <https://www.britannica.com/story/is-it-true-that-squirrels-forget-where-they-bury-about-half-of-their-food>
- H. Ritchie, "Deforestation and Forest Loss," *Our World in Data*, 2021, <https://ourworldindata.org/deforestation#article-citation>
- E. Sadler-Smith, "Communicating Climate Change Risk and Enabling Pro-environmental Behavioral Change Through Human Resource Development," *Advances in Developing Human Resources*, vol. 17, no. 4, pp. 442-459, 2015.
- E. Scully-Russ, "The Contours of Green Human Resource Development," *Advances in Developing Human Resources*, vol. 17, no. 4, pp. 411-425, 2015.
- S. Sen, "National Squirrel Appreciation Day 2024: All About the January 21 Celebration Dedicated to our Furry Neighbors," *Hindustan Times*, 2024, <https://www.hindustantimes.com/world-news/us-news/national-squirrel-appreciation-day-2024-all-about-the-january-21-celebration-dedicated-to-our-furry-neighbours-101705803016029.html>
- L. Stanz, S. Silverstein, D. Vo, and J. Thompson, "Leading Through Rapid Change Management," *Hospitality Pharmacy*, vol. 57, no. 4, pp. 422-424, 2022.
- M. A. Steele, L. Z. Hadj-Chikh, and J. Hazeltine, "Caching and Feeding Decisions by *Sciurus Carolinensis*: Responses to Weevil-infested Acorns," *Journal of Mammalogy*, vol. 77, pp. 305-314, 1996.

- M. A. Steele, and X. Yi, "Squirrel-seed Interactions: The Evolutionary Strategies and Impact of Squirrels as Both Seed Predators and Seed Dispersers," *Frontiers in Ecology and Evolution*, vol. 8, no. 259, pp. 1-11, 2020.
- J. Sukhera, "Narrative Reviews: Flexible, Rigorous, and Practical," *Journal of Graduate Medical Education*, vol. 14, no. 4, pp. 414-417, 2022.
- R. A. Swanson, and E. F. Holton, "Foundations of Human Resource Development," *Berrett-Koehler Publishers*, 2001.
- R. J. Torraco, and H. Lundgren, "What HRD is Doing-What HRD Should be Doing: The Case for Transforming HRD," *Human Resource Development Review*, vol. 19, no. 1, pp. 39-65, 2020.
- UNESCO, "Education for Sustainable Development: A Roadmap," *United Nations Educational, Scientific and Cultural*, 2020, <https://doi.org/10.54675/YFRE1448>
- University of Richmond (UR), "Researchers tackle the nutty truth on acorns and squirrels," *Science Daily*, 1998, <https://www.sciencedaily.com/releases/1998/11/981126102802.htm>
- C. Valentin, "Greening HRD: Conceptualizing the Triple Bottom Line for HRD Practice, Teaching, and Research," *Advances in Developing Human Resources*, vol. 17, no. 4, pp. 426-441, 2015.
- S. B. Vander Wall, "Food Hoarding in Animals," *University of Chicago Press*, 1990.
- S. B. Vander Wall, "The Evolutionary Ecology of Nut Dispersal," *Botanical Review*, vol. 67, pp. 74-117, 2001.
- J. Wang, "HRD for Societal Development: What Can we Learn from Social Entrepreneurship in the Developing World?" *Advances in Developing Human Resources*, vol. 14, no. 3, pp. 305-317, 2012.
- J. M. Werner, "Connecting the Dots or Ships Passing in the Night," *The Routledge Companion to Human Resource Development*, 2015.
- WWA, "Extreme Downpours Increasing in Southern Spain as Fossil Fuel Emissions Heat the Climate," *World Weather Attribution*, 2024, <https://www.worldweatherattribution.org/extreme-downpours-increasing-in-southern-spain-as-fossil-fuel-emissions-heat-the-climate/>
- J. Worland, "Here's how Many Trees Humans Cut Down Each Year," *Time Magazine*, 2015, <https://time.com/4019277/trees-humans-deforestation/>
- X. Yi, Y. Yang, R. Curtis, A. W. Bartlow, S. J. Agosta, and M. A. Steele, "Alternative Strategies of Seed Predator Escape by Early-Germinating Oaks in Asia and North America," *Ecology and Evolution*, vol. 2, pp. 487-492, 2012.