

Transdisciplinary Research: A Social Work Perspective

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ABSTRACT: *The aim of this article is to explore how to incorporate transdisciplinary research into social work in order to meet the evolving demands of social work researchers and academicians. Trans-disciplinarity is a unique research style that incorporates and transcends many disciplinary boundaries to create a holistic approach as solving complex real-world problems requires bringing together insights from multiple disciplines (Pedersen, D. 2016). The presented model incorporates transdisciplinary research into the field of social work by taking conclusions from Kenneth Yongabi's (2015) 'Transdisciplinary Approach for Intervention in Public-Health'. The model combines studies surrounding social work areas, as well as crossing boundaries in the field of humanities, finance, economics, law and technology. As a result, the presented article on transdisciplinary research in social work will generate new insights by integrating different contexts and knowledge bases from research and other disciplines.*

Keywords: *transdisciplinary research, social work, humanities, finance, economics, law and technology.*

1. INTRODUCTION

The aim of this article is to explore how to incorporate transdisciplinary research into social work in order to meet the evolving demands of social work researchers and academicians. The focus here is on the need for transdisciplinary research which has grown in response to the emerging demand for innovation in scientific understanding of complex problems characterized by rising levels of complexity, that emphasizes on social issues and sustainable solutions (Hirsch Hadorn et al., 2008). Pohl and Hirsch Hadorn et al. (2008), define interdisciplinary research as a form of coordinated and integration-oriented collaboration among researchers from different disciplines.

Trans-disciplinarity is a unique research style that incorporates and transcends many disciplinary boundaries to create holistic approach. It refers to research that focuses on issues that include two or more fields, such as research that combines social work and information communication technology. Transdisciplinary research can refer to principles or methods that were introduced by one discipline but are now used by several others, such as ethnography, a field research that was developed by another discipline but is now used by several others.

2. CLASSIFICATION OF DISCIPLINARY APPROACHES

According to Dyer(2003) and Choi & Pak (2006), words including interdisciplinary, multidisciplinary, and transdisciplinary are often used interchangeably, so clarifying each would ideally provide a clearer interpretation of this article. To explain the significance of each term, the classification and comparison of broad-ranging disciplinary methods are presented:-

- **Monodisciplinary:** The word "mono" means "one." This approach denotes the practice and study of only one field which is used to address a social issue.
- **Multidisciplinary:** Here, research and practice take us beyond just one domain or a single field of study that is involved in the social problem-solving and into the realms of many disciplines.
- **Interdisciplinary:** While the multidisciplinary solution compares and contrast experts by seating them at the table next to each other, the interdisciplinary approach coordinates their knowledge, expertise and theoretical frameworks (Lattanzi, 1998).
- **Transdisciplinary:** Trans-disciplinarity is a reflexive, integrative, method-driven scientific principle aiming at the solution or transition of societal problems and concurrently of related scientific problems by differentiating and integrating knowledge from various scientific and societal bodies of knowledge (Scholz RW, Spörri A &Lang DJ, 2009).

3. SCOPE AND RELEVANCE IN SOCIAL WORK

Transdisciplinary research arose as a result of an increasing array of complicated problems in the real world that need science-based solutions but for which knowledge of a particular scientific discipline or social area is inadequate. As transdisciplinary researchers collaborate with diverse partners outside of academia to tackle sustainability problems (Steelman, T. 2020). A transdisciplinary methodology can provide a systemic, all-encompassing theoretical structure for defining and analysing the social, economic, political, environmental, and structural variables that influence human health and well-being pertaining to social phenomena.

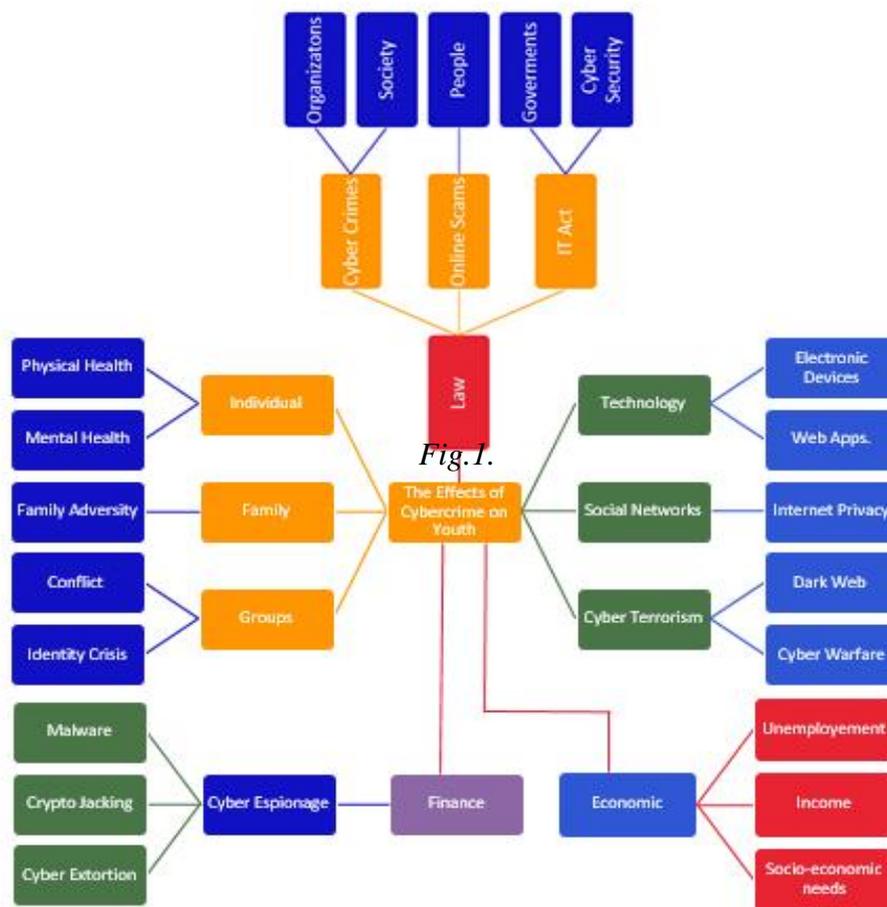
Transdisciplinary study has different success standards than conventional, curiosity-driven research due to the dynamics and practices of social engagement and the contextual essence of the research. Documenting patterns of engagement in the field of social work would help to inform project results and confirm progress toward interim goals on the path to sustainability. Such practices integrate knowledge across disciplines (interdisciplinarity) and sectors (intersectorality) in order to learn to enact, educate, and research complex responsible management (Laasch, O. 2020).

The implementation of a transdisciplinary programme to traditional social work instruction would have a huge influence on social work education as the traditional/transdisciplinary educational experience could best be described as, walking in two worlds (Carol Broersma, 2014). The conventional educational component only offers necessary information as well as a formal basis for social work skills. Nonetheless, the transdisciplinary component results in the radical shifts of one's thinking and approach in using certain skills that are relevant in today's real-life social work practice.

4. INTEGRATION OF TRANSDISCIPLINARY RESEARCH IN SOCIAL WORK

Solving complex real-world problems requires bringing together insights from multiple disciplines (Pedersen, D. 2016) as it is impossible to resist incorporating transdisciplinary studies into the field of social work. As social workers, researchers, and academicians, contend with a wide range of challenging issues. This inclusion would provide better results in:

- Responding to concerns that acknowledge the shortcomings of the compartmentalized methods of social work.
- Serve as a dialogue between science and society,
- Reflect on the progressions of society and the economy.
- Act as a bridge between science, humanities and technology.



Transdisciplinary Approach: Integration in Social Work (Umesh & Clayton, 2021)

The presented framework incorporates transdisciplinary research into the field of social work by taking conclusions from Kenneth Yongabi's (2015) 'Transdisciplinary Approach for Intervention in Public-Health'. The model combines studies surrounding social work areas, as well as crossing boundaries in the field of finance, economics, law and technology.

The effects of cybercrime on youth – a model for transdisciplinary research in social work

a) Individuals, Groups and Families

In considering the effects of cybercrime on the youth, the focus here is on individuals, families and groups as social work is a practice-based profession that promotes social change, development, cohesion and the empowerment of people and communities (Social Work License, 2021). Many social work researchers here would specialize in supporting a single demographic or operating in a specific environment, providing just a myopic perspective. However, by integrating a transdisciplinary approach, a holistic integration of each area including mental health, physical wellbeing, family adversity, conflict and identity crisis would serve as method-driven scientific solutions on the effects of cybercrime on young people.

b) Finance

Financial scams operate in many different ways. Although these scams don't necessarily target youth, they may be more likely to fall victim to fraudsters and con artists who just know how to take advantage of them (Janet Fowler, 2020). It usually begins when they get an email or text message, or see a social media commercial, with an invitation to participate in a magnificent opportunity with large payouts. The number of cases of 14 to 18 year olds who have allowed their bank accounts to be used to divert funds has grown by 73% in two years (Kevin Peachey, 2019). While there is no single, unified concept of cyber espionage, it has been described as a method of intelligence gathering, specifically as a process of extracting information that is not ordinarily publicly accessible, using human sources or technological means such as hacking into computer systems, creation of malware, crypto jacking and cyber extortion (Sulmasky and Yoo, p. 637). From cryptocurrency schemes to shutting down schools some of the biggest cybercrimes in 2020 and in recent year have been pulled off by individuals who weren't old enough to graduate high school (Casey Crane, 2020). Many young people remain ignorant of the adverse effects that financial crime will have on their career prospects. It is important to note that, because of their age, energy, and learning skills, young people are vital drivers of progress in shaping a sustainable world. With technological advancements, cybercrime is more likely to continue its effects on young communities and the incorporation of social work research will allow for a deeper understanding of this novel problem.

c) Technology

Today's youth use technology in a multitude of ways, like texting, tweeting, blogging, video gaming, and surfing through various internet portals (Joshi, S.V. 2019). Various studies have revealed that electronic devices and applications have an effect on the inner psychological equilibrium, as well as the variety of skills and attitudes built around the specific features of the device. Research has shown that, restricting time for social events causes teenagers to minimize their social circle and experience loneliness, leading them to spend more time online. Similarly, as they begin to sacrifice sleep, they become exhausted, and therefore continue to spend more time indoors in front of a laptop, smartphone or any digital device creating a vicious circle (Vinayak Garg, 2019). As a result, majority of young people suffer from insomnia, depression, anxiety, and suicidal tendencies (Joshi, S.V. 2019). Transdisciplinary research here would provide useful information to handle individuals suffering from trauma and illnesses as a result of technological consequences by applying social work methods.

d) Law

The tech-savvy youth of today can knowingly or unknowingly break cyber laws and commit cybercrimes (Sushma Sosha, 2017). The dark side of cyberspace is proving lethal for youngsters, with reports of cybercrimes on the rise affecting organizations and societies at large. From increasing instances of morphed images shared across Facebook and WhatsApp groups to hurtful remarks, young men and women are not spared. Cybercrime is a serious criminal offence under IT Act. Newly released data from the Federal Trade Commission reveal that there has been a surge in reports from people who say they lost money to a scam that started on social media, including a spike of these complaints in the spring at the height of the COVID-19 pandemic (FTC. 2019). In India, cyber laws are specified under the Information Technology Act 2000, and the goal of this law/act is to provide a legal forum for electronic commerce, as well as to provide a protection for governments, organizations, institutions, and other sectors for their online businesses or transactions. To keep up with the current technological revolution, youth must hone core cybersecurity skills and the integration of transdisciplinary disciplinary study will fill the gap between law, humanities, and technology.

e) Social Networks

Until recently, Facebook ruled the social media landscape of America's millennials – but according to a new Pew Research Center report, it is no longer the most influential online site among teenagers. Today, about half (51 percent) of 13- to 17-year-olds in the United States claim they use Facebook, which is far smaller than the percentages who use YouTube, Instagram, or Snapchat.

% of U.S. teens who ...

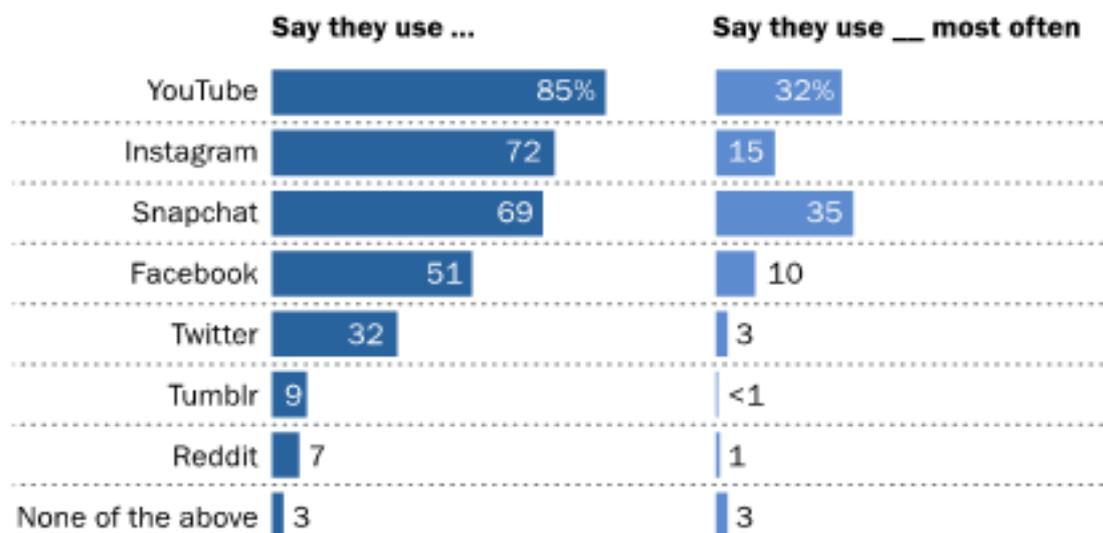


Fig 2. Social Network use in 2021 (PEW Research Center. 2021)

The study also discovered that there is no strong consensus among teenagers on the impact of social media on the lives of today's youth. Minorities of teens identify the result as mainly positive (31%) or mostly negative (24%), but the majority (45%) claims it has been neither positive nor negative. However, other studies have found associations between excessive social media use and depression or anxiety symptoms. Livingstone S., (2019) noted that young people were too trusting with the sensitive details they post online, making them

vulnerable to cybercrime and identity scams. A systematic analysis of such issues relating to social networking and adolescents' reactions to it, as well as efforts to disseminate harmful causes, may offer a broad viewpoint through transdisciplinary studies to investigate this versatile domain from a social work perspective.

f) Cyber Terrorism

The primary goal of cyber terrorists today is to cripple a country's vital infrastructure by cyber-attacks in order to advance the causes they support as a terrorist organization (Amaresh Pujar, 2016). According to the U.S. Federal Bureau of Investigation, "Cyber terrorism is any premeditated, politically motivated attack against information, computer systems, computer programs, and data which results in violence against non-combatant targets by sub-national groups or clandestine agents. It is difficult, especially in the early stages of an incident to determine if the attacker is a, terrorist, group, foreign state, criminals, or even a teenager. A brief review of cyber-attacks indicates that criminals and bored youth who are the most likely targets of carryout cyber terrorist attack. To this day, the vast majority of hacking attacks are the product of the activities of teenage hackers (James, A. 2002). A comprehensive study of youth affected by cyber terrorism will aid in the development of a stable, fully integrated analysis to deal with complicated problems that are vital to every country's security and defending the interests of the youth through transdisciplinary studies and social work practise.

g) Economy

India's and China's geopolitical and economic power struggles have resulted in a spike in cyber-attacks and other cyber threat activity between the two countries (John Leyden, 2020). The Covid-19 pandemic which descended in the year 2020 forced lockdowns. That, in turn, ushered in an economic slowdown, sending lakhs people including the country's young, tech-savvy populace out of jobs. As businesses shut, the unravelling situation denied many the right to live the life they believed in, luring them towards crime and violence affecting their socio-economic status as well (The New Indian Express, 2020). As the economy has slowed, resulting in unemployment and the closing of numerous businesses, there is a much stronger need to combine transdisciplinary research with social work practice to identify the issues at hand and find appropriate solutions in solving this worsening condition.

Any new invention affects, to a certain extent, the inner psychological equilibrium, the range of

skills and behaviors developed around the very features of the object in question

The above model thus, encompassed research across individuals, families, groups, technology, social networks, cyber terrorism, cyber espionage, finance, economics and law. An integration in each area will serve as method driven empirical solutions aimed at solving transitioning social relevant issues. This transformation as stated is multifaceted because it arises from within the social scientific community as technological advances and new technical challenges develop which are not limited to a single academic viewpoint.

Application of Transdisciplinary Research in Social Work

Social-scientific sustainability research is faced with epistemological and methodological challenges and recent trends towards greater disciplinary integration (Fahy & Rau, 2013). The call for a more engaging and interdisciplinary sustainability science, which builds upon disciplinary excellence, will need to be a central part of a scientific paradigm that espouses new (and real) models of ecological modernization" (Franklin & Blyton, 2013, p. 298).

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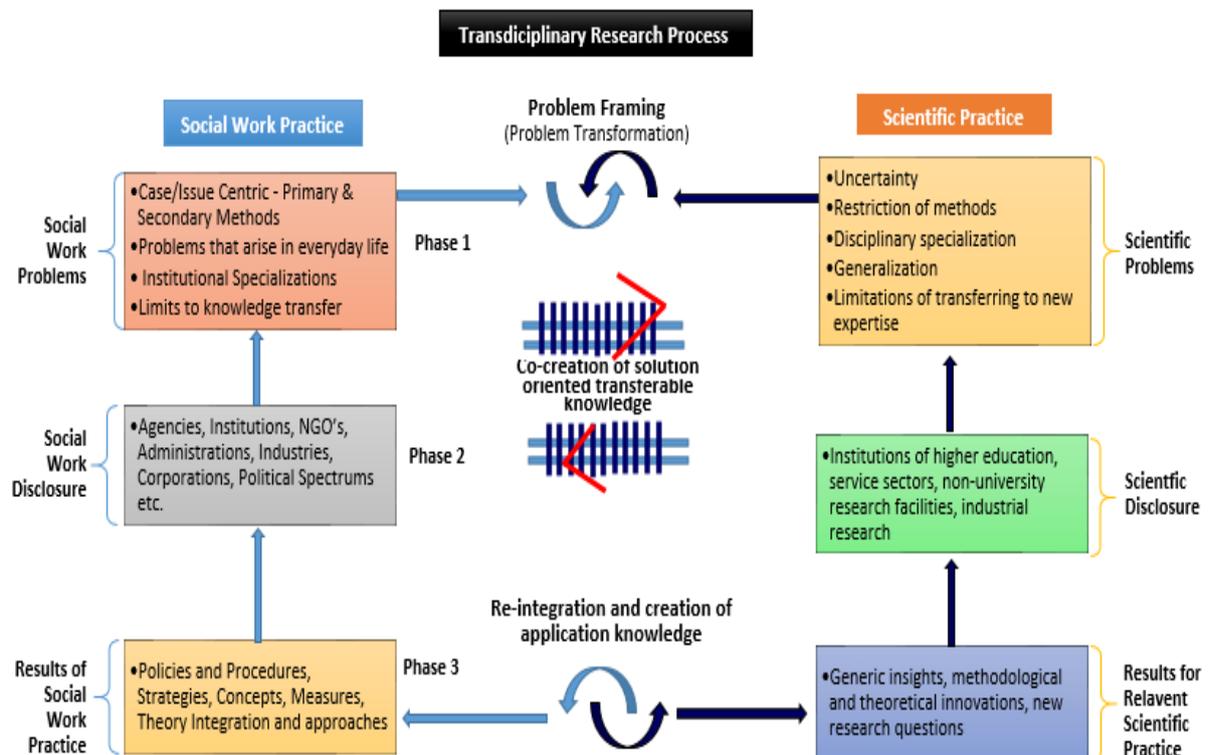


Fig.3.

Adapted from Daniel Lang et.al. (2012) – Revised by Umesh Samuel & Clayton (2021)

Hence, transdisciplinary research in social work would build new knowledge by combining various problem experiences and knowledge bases from research and social experience. To better understand this integration a model proposed by Lang.et.al (2012) is modified to suit the field of social work. The model proposed is a three-phase framework that incorporates social work into a scientific practice requiring a transdisciplinary study method.

Phase 1: Collaborative problem framing

This phase consists of multiple activities:

- Recognizing and identifying a real-world problem
- Establishing a mutually agreed-upon research object, which includes the mutual definition of research priorities and fundamental research-related as well as societally relevant questions;
- Creating a conceptual and theoretical framework for data integration and
- Forming a collective research team.

Phase 2: Co-creation of solution-oriented and transferable knowledge

- This is the process in which the actual research is carried out.
- During this step, a series of integrative (scientific) approaches is introduced, created, and implemented to aid in the distinction and incorporation of the various bodies of information that will be brought together in the process.
- In this stage, collaborative research enables practical and interactive goal-oriented collaboration across various disciplines, as well as between researchers and actors outside academia.

Phase 3: (Re-)integrating and applying the co-created knowledge

- This phase is the process of using, applying, and implementing the research results.
- Various viewpoints, worldviews, traditions, and forms of experience are combined into the transdisciplinary research process
- This phase is not a classical form of knowledge transfer from science to practice instead, a (re-)integration of the results into:
(a) the societal practice (e.g., implementation of the evidence-based strategies and action programs generated during the research)
(b) the scientific practice (e.g., comparison, generalization, and incorporation of results into the scientific body of literature).

5. CONCLUSION

Transdisciplinarity, as described here, is essentially holistic and thus congruent with social work values. While a few mentions relate to social work, relevant references that originate in other disciplines predominate as the field of social work has yet to produce a significant body of information on the topic (Gehlert, S. 2017). Current social work research and education continue to be valuable, but how is it changing to address the demands of today's transdisciplinary work culture is the real question. The presented model on transdisciplinary methodology and convergence of social work is thus an effort to incorporate social work across borders in the fields of humanities, finance, economics, law, and technology. As a result, transdisciplinary research in social work will generate new insights by integrating different contexts and knowledge bases from research and other disciplines. This article therefore, offers an overview of the essence of transdisciplinary and social work interests in the light of emerging study styles, as well as assessments of the relationship of research to societal impact.

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