PANDA (Participatory Appraisal of Needs and Development of Action)

A Multi Methodological Framework

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Introduction

PANDA (Participatory Appraisal of Needs and Development of Action) is a framework developed during the 1990s for use in planning and implementing group decision-making in multiagency settings. PANDA was developed through critical reflection on our own practice and that of others. Much of our own practice (both individually and together) has been in the field of community or third sector operational research. The term PANDA first appeared in print in 1997 [1] and was fully described in Taket and White [2]. PANDA is based on a theoretical stance labelled as post-structuralist or postmodernist [3]. PANDA represents one particular type of multimethodology [4], based on a stance of pragmatic pluralism [4,5]. In this chapter the development of PANDA is covered and linked to earlier work, both inside and outside the systems field. A previously unpublished example of PANDA in practice is then described, and challenges and directions for the future are highlighted and discussed.

Within a PANDA process four different stages are involved: initial deliberation; debate, decision; and further deliberation; these may be cycled through several times as required.
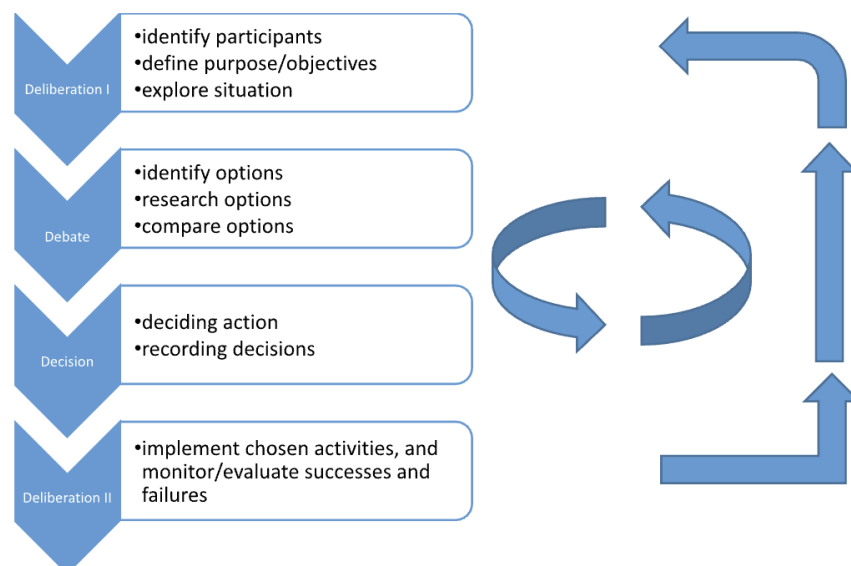
PANDA's pedigree, or the rhizomatic roots of PANDA

The conditions of possibility for the emergence of PANDA lie in the 1980s: in the heyday of Thatcherism in the UK; in the early years of community OR; and in the growing recognition of the importance of soft methodologies in responding more appropriately to the "messy" [6], "wicked" [7,8] problems that abound in the growing swamp of neoliberal multinational corporate capitalism. Our way forward was informed by poststructuralist and feminist writers for example: [9–11]. We explored our research and practice agenda in relation to developing our practices in community OR through: refusing and deconstructing the binary oppositions of soft versus hard systems thinking and OR and instead opening a space for the generation and consideration of multiple meanings and positions, a strategy of pluralism [3]; in terms of dethroning the role of the practitioner (s)/facilitator(s) as experts [12]; and, introducing a notion of consent (to participation, to choice of options etc), which is more achievable than 'consensus' [12,13].

Through later papers we explored further questions of theory [12], pushing the manifesto of Howard et al [14] a little further to generate further possibilities for loosening the hold of the 'expert' (be it operational research or systems practitioner) to open up more possibilities for what would now be called the co-creation or co-design of action decisions together with involved parties. This involved recognising the importance of working with emotion and conflict and we explored drawing on a wide range of techniques and approaches from group work, counselling, therapy etc. to help in these processes [15–18].

Alongside this ran the recognition that power relations need consideration, and a realisation that identifying methods for use through defining the context for systemic practice in frameworks such as the system of systems methodologies [19] ill-fitted the shifting and contingent dynamics of the situations we found ourselves working in [13,20]. Hence in PANDA [2] we work with a concept of the operation of power drawn from Foucault [21,22] and Bourdieu [23] as intimately connected to the different actors/agents involved in the situation of concern and requiring examination by the facilitators of systemic practice as part and parcel of a reflective practice.

The particular inspiration for pulling together PANDA came out of working with methods in the development field such as Rapid Rural Appraisal (RRA) [24], and its later formulation PRA, Participatory Rural Appraisal [25], together with issue structuring methods (specifically: AIDA (analysis on interconnected decision areas Harary et al. [26]); Stages from Team Syntegrity, such as Problem Jostle and Hexadic Reduction [27]; Comparative advantage [28]; Strategic Assumption Surfacing and Testing [29]; Mapping and influence diagrams [30]; Commitment packages [31]; and Action methods [32,33], where the issue structuring methods are used to build on the strengths of RRA/PRA while addressing its limitations, particularly in terms of moving beyond the stage of exploring an issue and generating data to generating and exploring possible options and then to selecting and implementing a course of action [1]. We conceived of PANDA as providing a useful framework to guide selection of processes within an intervention. In its detailed development [2] we summarised a PANDA process (see Figure 1) and offered a brief statement (Table 1) that captured our ontological and epistemological positions.

Deliberation I
- identify participants
- define purpose/objectives
- explore situation

Debate
- identify options
- research options
- compare options

Decision
- deciding action
- recording decisions

Deliberation II
- implement chosen activities, and monitor/evaluate successes and failures

It is important to note the unique use of issue structuring methods within PANDA. In our community OR practice (both singly and together) these are rarely used in their entirety, they have been disassembled and parts spliced to parts of other methods [3,12,34,35]. Corresponding to each of the nine elements in Figure 1 we presented a list of some of our favourite methods, or fragments thereof, for use [2], intended as a jumping off point rather than a prescription.

The only guarantee is that there are no guarantees
The only grand narrative is that there are no grand narratives
Use only what you feel comfortable with, ... but take risks and expand your boundaries of comfort
Wherever oppression/power is exercised there is the possibility of resistance, empowerment and change
Theory is dead - long live theorising
Have fun - but it will hurt too (or no pain no gain!)

Table 1: The paradoxes of PANDA. Source: Taket and White, 2000, p. 187

Above PANDA has been presented as a mongrel nomad breed (following [36]), suitable for use in working flexibly in a variety of situations. This is in contrast to other frameworks such as the system of systems methodologies that make choices of methodology in a somewhat deterministic fashion. PANDA's base lies in pragmatic pluralism and its foregrounding of the role of facilitator(s) and scrutiny of power relations. Thus, PANDA can be viewed as an ever-changing rhizomatic framework, ever seeking to widen the scope of work it draws inspiration from and the methods it uses. For example, Taket [37] expanded further on questions of facilitation, while Taket and White [38] described extending the work of others [39,40] on the use of metaphors for understanding the multi-organisational setting, working with the metaphors of the CybOrg and the rhizome. The case study below carried this process further forward.

Finally, later work that can be connected to PANDA is based on the observation of problem structuring behaviours observed in interventions that did not use recognisable or classical methods or approaches [41]. From this work a very distinct source of PANDA-like interventions was apparent. This is similar to observations on what is called Hybrid Forums originating in the work of Callon and others, as well as work emerging from the field of Actor Network Theory (ANT). Some examples of Hybrid Forums are presented in Yearworth and White [42], with a view to stimulating dialogue with a new or emerging group(s) of practitioners from other traditions, this is in keeping with the nomadic or mongrel spirit of PANDA.

The practice(s) of freedom: a case study on increasing community cohesion

Following a series of riots and disturbances in ethnically mixed towns mostly in the north of England during the summer of 2001, the UK government responded and embarked on a programme to strengthen their capacity for conflict resolution. The programme was directed at a number of communities that had experienced or were affected by the disturbances or where it was considered that there would be a substantial risk of violent racial incidents. The programme emphasised providing and ensuring access to suitable conflict resolution expertise, deploying community facilitators, and to promote training,

community development and support for this activity. There were two main types of projects funded: either projects specifically based on mediation, facilitation or conflict resolution; or projects with a more community-development focus emphasising cross-cultural learning.

This work was an evaluation of the programme after it had ended, in order to appraise how well it met the planned aims and purposes -- and to provide insights and examples of good practices and learning to inform future initiatives. The evaluation approach, following PANDA was participative, and action oriented. The purpose was to model the processes, mechanisms and structures that developed as a result of the programme that attempted to establish facilitation, mediation and community development activities in the chosen communities by the programme. The evaluation design, by following the PANDA approach included interviews and collaborative workshops, where the participants were able to engage and interact with each other. A wide range of stakeholders, who were either directly or indirectly involved in the programme and the community, were also involved in the evaluation.

The evaluation itself was organised in four parts. First (corresponding to the Deliberation I Stage in figure 1), was a document analysis of over 100 projects from all the nine regions, which was carried out to appreciate the range of activities and to appraise the impact on the local community and beyond, if relevant. Second (corresponding to the Deliberation I and Debate Stages from Figure 1). All nine regions were visited for orientation, interviews with key stakeholders, including community gatekeepers, and informal group sessions. These were undertaken to obtain trust and access and also to gain an impression of the programme as a whole. Third, (further in-depth work on the Debate stage in figure 1) six main projects from four different areas were identified to be key case studies for more in-depth understanding of the activities that were carried out. Finally, (the Deliberation II in figure 1), a number of overview and feedback sessions were held regionally, with one final national event held at the end of the study. These were used to validate the findings and to explore emergent viewpoints and ideas.

Findings from the study

The study indicates that there are valuable lessons to emerge from the programme with implications for future policy and practice. We present, here, some themes that arose during the implementation and delivery of the programme. These reflected the beliefs and concerns found from the frontline projects, localities and the community.

Competent Community

There had been considerable confusion in the terminology used, for example, people often used the terms 'community facilitation' and 'community cohesion' interchangeably. Some talked of 'conflict resolution' and some of 'facilitation'. The lack of clarity about these quite different, though connected, activities was an issue in the implementation of the programme and in the relationship between it and other frontline initiatives in the broad area of community-based development.

During the evaluation work with the community a notion of a 'community' emerged which may or may not have provided them with a clear or acceptable identity. On this basis, the participants settled on the notion of a 'community area' that will have a number of interest groupings, many of which will be based on race, culture or religion, but some will also be about class, age, length of time in the area and so on.

The participants also wanted a wider notion of the 'competent community' to represent a broader view during the evaluation. This view emerged directly from the evaluation study. It was seen as a way of describing a community that has at hand, or is building towards having at hand, all the components required to provide a system for wide-ranging conflict resolution. First, with this view it assumes the capacity and capability is already within the community and that all there needs to be is some means to surface these and to maintain these broader community capabilities. Second, the notion of a competent community assumes that the prevention of the underlying causes of disturbances (such as poverty, exclusion and deprivation) rely on wider systems and developments, i.e. those that are closer to the ideals of community development mindset and cohesion. The participants recognised a model of working that aimed at developing the capability to acknowledge, assign, accomplish and agree that the inevitable conflicts occur in the process of community change. Building community capability and competencies was seen as the means to move communities from being potentially disruptive towards being possibly cohesive.

As participants at all levels in the programme including the community representatives, made clear, it is unlikely that the causes of conflict and violence in and between communities reside 'simply' in any one person, group of people or between groups. They believed the grounds for conflict are complex, dynamic and systemic. Developing an understanding of the grounds for conflict can lead to the development of approaches which are appropriate at different 'stages' in seeking to reduce community conflict. The 'stages' involved in addressing conflict could include:

- planning for action;
- providing intelligence;
- promoting informal and formal arrangements for partnership and cooperation;
- recruiting people with key expertise; and
- carrying out longer-term conflict prevention work.

To build a 'competent community', different approaches and actions, for example monitoring, conflict resolution, community facilitation, mediation, and community development, are all needed. The idea is to find ways in which these can inform and support each other. Finally, communities are resourceful. This is the belief that the intelligence, ideas about potential solutions, abilities, motivation and resourcefulness that reside in communities are more likely to ensure that community competence is realised. This contrasts with the policy tendency to promote, if not impose, approaches and ideas from elsewhere.

Participation

The participants in the evaluation recognised that understanding and finding ways of tackling conflict requires an awareness that there are problems in the wider participation at the community level in attempts to address these problems. The ways forward will need to build on:

- Enabling people to get involved;
- Reaching the community;
- Identifying appropriate values; and
- Developing suitable approaches.

The evaluation study suggests that the way people think about participation is significant in shaping responses, approaches and strategies to dealing with community conflict.

Conflict Can Be Positive

The study found that there needs to be a recognition that there will always be differences and a degree of conflict in communities and that this is healthy. Conflict usually has a negative connotation. The participants agreed that it may be helpful to see how conflict may be positive and possibly essential to effective change if the issues are channelled into the kind of debates and exchanges which can help build solutions.

Conflict Can 'get into' People and Organisations

The participants stressed that conflict situations, because they are intense and emotive, can be distressing and can cause high levels of anxiety not just for the people, but also for organisations and partnerships trying to prevent unrest and disturbances. Good provisions that acknowledge these emotional impacts are needed to help to ensure that the issues are not 'acted out' in inappropriate ways.

In Summary

The evaluation indicates that the investment in the programme and the contribution of the combination of different projects provided important opportunities to explore and rethink some key issues in relation to community cohesion. The key perceptions came, it is suggested here, from the frontline projects and their participants, and so the learning from the programme through the evaluation approach adopted has focused on some of the details of relationships, of helping people to get involved, debating the way forward and agreeing the 'action points'. Managing anxieties and finding ways to reassure people in the communities that they could speak out safely and effectively also emerged as a crucial element, perhaps the pre- requirement, for increasing participation and, therefore, making progress. The case study illustrates previously identified [2] key features of PANDA that render it appropriate to deal with complex multi agency situations, namely:

> *We are not declaring that 'anything goes', but 'doing what feels good'. We are not suggesting that choice is unreflective, but that a skeptical rigour is applied, i.e., in a pluralist world we refuse to privilege one statement or view over another. The aim is to be deconstructive. This would mean:*
>
> - *To find exception to generalisations and grand narratives;*
> - *To question rhetorical devices;*
> - *To challenge 'taken-for granted' statements;*
> - *To acknowledge, respect and work on difference; and*
> - *To employ new and unusual terminology (following Rorty).*
>
> *Finally in our prelude we would like to say that in working in the multiagency setting reason and rationality are not enough, confidence in the use of emotions, feelings, intuition, creativity, imagination and flexibility are also priorities. This way managing in the multiagency setting will be participative and involve the social body in all its heterogeneous forms. It will be non-exclusive and non-isolationist and the criteria of evaluation may be in the aesthetic or beauty as judged by the participants in the form of collaboration produced.*
> *([2], p. 236)*

Where to next?

Writing in the era of Trump and Brexit and the ongoing crises posed by the very real material and accelerating effects of human-generated climate change intensifies the need for creative approaches grounded in pragmatic pluralism. We see this as widening the scope of tools for practice aimed at positive social change using theatre and other arts-based methods (see for example: [43–46]). We are also witnessing the desire to move away from forums which ostensibly divide the public and specialists in an asymmetric way, towards being replaced by hybrid forums of concerned stakeholders and experts working as symmetrical assemblages [47]. Understanding and action are now dynamically co-produced by the close cooperation of the participants in a process of "social learning" [48]. We see this as an important development which may lead to the emergence of new social identities characterised by openness and the will to mobilise [42].

Climate change and its consequences make the incorporation of insights from ecological and environmental systems thinking imperative [49]. The underlying commitments in critical systems thinking need to be recast to better enable working with the embedded stakeholders in sociological systems, including non-human agents [50]. This has also been developed into evaluation guidance that brings together innovative systemic evaluation practice with intersectional analysis, promoting transdisciplinary evaluation methods, rethinking systemic evaluation methodology, and introducing the Gender equality, Environments and Marginalized voices (GEMs) framework [51], this forms part of the UN Women series on evaluation guidance.

Finally, considerable research has examined the background and benefits of systems methods in practice. Yet, there is still little attention on reflection and co-creation between practitioners, researchers, facilitators and users that fully embrace pluralism and diversity to share knowledge. We revisited our theorization and found empirical support for PANDA that under some conditions—an openness to involve the social body in all its heterogeneous forms [2]— makes it possible to deal with complex multiagency situations. We highlight that settings, often seen as impractical for systems interventions (in our case, community response to riots), can, under some circumstances, support openness and willingness to share and own knowledge. Our perspective illustrates that a pluralistic approach has a positive effect on extremely complex settings as actors aim to develop appropriate plans and actions.

References

1. White L, Taket A. Beyond appraisal: Participatory Appraisal of Needs and the Development of Action (PANDA). Omega. 1997;25: 523–534. doi:10.1016/S0305-0483(97)00027-3

2. Taket A, White L. Partnership and Participation: Decision-making in the Multiagency Setting. Wiley; 2000. Available: https://play.google.com/store/books/details?id=NISBQgAACAAJ

3. Taket A, White L. After OR: An Agenda for Postmodernism and Poststructuralism in OR. J Oper Res Soc. 1993;44: 867–881. doi:10.1057/jors.1993.156

4. White L, Taket A, Others. Critiquing multimethodology as metamethodology: working towards pragmatic pluralism. Multimethodology: The theory and practice of combining management science methodologies. 1997;379: 407.

5. Taket A, White L. Pragmatic pluralism—An explication. Systems Practice. 1996;9: 571–586. doi:10.1007/bf02169214

6. Schon DA. Educating the reflective practitioner: toward a new design for teaching and learning in the professions. Australian Journal of Adult Learning. 1987;50: 448–451.

7. Churchman CW. Guest editorial: Wicked problems. JSTOR; 1967.

8. Rittel HWJ, Webber MM. Dilemmas in a general theory of planning. Policy Sciences. 1973. pp. 155–169. doi:10.1007/bf01405730

9. Lyotard J-F. The Postmodern Condition: A Report on Knowledge. U of Minnesota Press; 1984. Available: https://play.google.com/store/books/details?id=ajqdpRHpO-oC

10. Harding SG. The Science Question in Feminism. Cornell University Press; 1986. Available: https://play.google.com/store/books/details?id=27TrCuk4LRgC

11. Collins PH. Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment. Contemporary Sociology. 1992. p. 132.

12. White L, Taket A. The death of the expert. J Oper Res Soc. 1994;45: 733–748. doi:10.1057/jors.1994.118

13. Taket AR, White LA. Visible responsibility: A guide for critical action. Proceedings of the 39th Annual Meeting of the 1SSS: Systems Thinking, Government Policy and Decision Making. 1995. pp. 1054–1061.

14. Howard N, Bennet P, Bryant J, Bradley M. Manifesto for a Theory of Drama and Irrational Choice. J Oper Res Soc. 1993;44: 99–103. doi:10.1057/jors.1993.19

15. Personal Counselors. Fundamentals of Co-counseling Manual for Beginning Classes in Re-evaluation Co-counseling. Rational Island Publishers; 1970.

16. Barker D. TA and training: the theory and use of transactional analysis in organisations. Gower; 1980.

17. Lewis HR, Streitfeld HS. Growth Games. Abacus; 1973. Available:

https://play.google.com/store/books/details?id=qrtVAAAACAAJ

18. Ernst S, L G. In our own hands: A book of self-help therapy. London: The Women's Press; 1981.

19. Jackson MC, Keys P. Towards a System of Systems Methodologies. J Oper Res Soc. 1984;35: 473–486. doi:10.1057/jors.1984.101

20. Taket A. Undercover Agency?–Ethics, Responsibility and the Practice of OR. J Oper Res Soc. 1994;45: 123–132. doi:10.1057/jors.1994.18

21. Foucault M. The history of sexuality: An introduction, volume I. Trans Robert Hurley New York: Vintage. 1976;95.

22. Foucault M. The Subject and Power. Crit Inq. 1982;8: 777–795. doi:10.1086/448181

23. Bourdieu P. Language and Symbolic Power. Harvard University Press; 1991. Available: https://play.google.com/store/books/details?id=u2ZlGBiJntAC

24. Chambers R. Rapid Rural Appraisal: Rationale and Repertoire. Milestones and Turning Points in Development Thinking. 1981. pp. 160–171.

25. Chambers R. The origins and practice of participatory rural appraisal. World Dev. 1994;22: 953–969. doi:10.1016/0305-750X(94)90141-4

26. Harary F, Jessop N, Luckman J, Stringer J. Analysis of Interconnected Decision Areas : an Algorithm for Project Development. Nature. 1965;206: 118–118. doi:10.1038/206118a0

27. Beer S. Beyond Dispute: The Invention of Team Syntegrity. Wiley; 1994. Available: https://play.google.com/store/books/details?id=VwVPAAAAMAAJ

28. Chambers R. Rural Appraisal: Rapid, Relaxed and Participatory. Institute of Development Studies; 1992. Available: https://play.google.com/store/books/details?id=3NC5QgAACAAJ

29. Mitroff I, Mason R. Creating a Dialectical Social Science: Concepts, Methods, and Models. Springer Netherlands; 1981.

30. Eden C. Analyzing cognitive maps to help structure issues or problems. Eur J Oper Res. 2004;159: 673–686. doi:10.1016/S0377-2217(03)00431-4

31. Friend JK, Hickling A. Planning Under Pressure: The Strategic Choice Approach. Routledge; 1987. Available: https://play.google.com/store/books/details?id=xJnpB5U3Eu8C

32. Fox J. The essential Moreno: Writings on psychodrama, group method, and spontaneity. New York: Springer Publishing Company Freeman, GD, Sullivan, K & Fulton, CR (2003) Effects of creative drama on selfconcept, social skills, and problem behavior The Journal of Educational Research. 1987;96: 131–138. Available: https://pdfs.semanticscholar.org/3993/220aec60e7d96f709174b3d5558f9950d19b.pdf

33. Sternberg P, Garcia A. Sociodrama: Who's in Your Shoes? Greenwood Publishing Group; 1989.

34. White LA. Development options for a rural community in Belize - alternative development and operational research. Int Trans Oper Res. 1994;1: 453–462. doi:10.1016/0969-6016(94)90007-8

35. Taket A, Bryant J, Ritchie C. Community Works: 26 Case Studies Showing Community Operational Research in Action. Pavic; 1994. Available: https://play.google.com/store/books/details?id=HA4yAAAACAAJ

36. Deleuze G, Guattari F. 1227: Treatise on nomadology--The war machine. A thousand plateaus: Capitalism and schizophrenia. 1987; 351–423.

37. Taket A. Organizing and Organizations: An Introduction. J Oper Res Soc. 2002;46: 136–137.

38. Taket A, White L. Playing with PANDA: The CybOrg and the Rhizome. In: Midgley G, Ochoa-Arias A, editors. Community Operational Research: OR and Systems Thinking for Community Development. Boston, MA: Springer US; 2004. pp. 253–272. doi:10.1007/978-1-4419-8911-6_11

39. Morgan G. Images of Organization. SAGE Publications; 1986. Available: https://play.google.com/store/books/details?id=QSjYCwAAQBAJ

40. Flood RL, Jackson MC. Creative Problem Solving: Total Systems Intervention. Wiley; 1991. Available: https://play.google.com/store/books/details?id=y6g-AQAAIAAJ

41. Yearworth M, White L. The non-codified use of problem structuring methods and the need for a generic constitutive definition. Eur J Oper Res. 2014;237: 932–945. doi:10.1016/j.ejor.2014.02.015

42. Yearworth M, White L. Spontaneous emergence of Community OR: Self-initiating, self-organising problem structuring mediated by social media. Eur J Oper Res. 2018;268: 809–824. doi:10.1016/j.ejor.2018.01.024

43. Dark K. Gender, Race and Money. Youtube; 6 Jun 2018. Available: https://www.youtube.com/watch?v=tvFI6qN1KgE

44. Dark K. Education, Reaching. In: Wiebe S, Lyle E, Wright PR, Dark K, McLarnon M, Day L, editors. Ways of Being in Teaching: Conversations and Reflections. Rotterdam: SensePublishers; 2017. pp. 25–31. doi:10.1007/978-94-6351-092-9_5

45. Lipkin J. Rabble-Rousing in St Louis with That Uppity Theatre. New Theatre Quarterly. 1993. pp. 367–378. doi:10.1017/s0266464x00008265

46. Lipkin J. Dance the Vote: On Rapid Response, Performance, the Election, and Civic Engagement. 2016.

47. Callon M, Lascoumes P, Barthe Y. The organization of hybrid forums. In: Callon M, Lascoumes P, Barthe Y, editors. Acting in an uncertain world: an essay on technical democracy. 2009.

48. Bandura A. Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review. 1977. pp. 191–215. doi:10.1037/0033-295x.84.2.191

49. Stephens A. Ecofeminism and Systems Thinking. 2013. doi:10.4324/9780203767283

50. Stephens A, Taket A, Gagliano M. Ecological justice for nature in critical systems thinking: Ecological justice for nature. Syst Res Behav Sci. 2019;36: 3–19. doi:10.1002/sres.2532

51. Stephens A, Lewis ED, Reddy S. Towards an Inclusive Systemic Evaluation for the SDGs: Gender equality, Environments and Marginalized voices (GEMs). Evaluation. 2018. pp. 220–236. doi:10.1177/1356389018766093