

ABSTRACT

The focus of this research study is on black South African women's experiences of being science students, becoming graduates and professionals, and the ways in which they navigate institutional and disciplinary spaces that have historically been dominated by white masculinities. Women scientists are living in a critical era as the socio-cultural and political-economic landscape is transforming rapidly, affecting changes in aspects of identity and processes of identification. The individual life histories of black South African women scientists provide a telling story of a society in transformation because they experience the world as an outlier group; paradoxically positioned within an interstitial space between their dual sense of belonging to and alienation from a marginal and an elite group. The racialised gender gap in STEM (Science, Technology, Engineering and Mathematics) disciplines raises critical concerns around the political nature of scientific enquiry and whether black women will achieve equity in society and economic empowerment if they continue to be marginalised from society's power structures. Little is known about their journeys into becoming the new generation of scientists in post-apartheid South Africa. Using a narrative method to enquire into the lives of 14 young women, the aim of the study was to critically examine questions of discursive, material and symbolic elements that emerge within their narratives across temporal shifts, and how these new meanings reflect specific subjectivities, reconfigure their dynamic social identities and transform time into 'other spaces' of belonging beyond categories of social divisions.

I applied a structural analysis to the narrative form, an intersectional analysis of the narrative content in order to identify discursive themes, while a narrative analysis was applied to a portrait of one participant in order to depict the entanglement of form, content and context of a life narrative. Based on the findings, a visual representation of a 'lived life' in relation to a 'told story' (Wengraf, 2011) is proposed as a useful device to analyse the ways in which multiple, fragmented and contradictory selves are constructed through narrative. By utilising these visual diagrams as a heuristic device, I claim that there are particular features that complicate a person's narrative identity, which I have organised into four patterns of storytelling, namely a 'labyrinth storymaze', a 'simply-connected storymaze', a 'multiply-connected storymaze' and a

‘weave storymaze’. It seems that failure is a defining feature that complicates, ruptures and convolutes people’s sense of their-selves through space-time.

This study presents a dialectical model for how black women scientists (co)construct them-selves as scientists through recognition from significant others, (de)construct them-selves as scientists through misrecognition and failure, and (re)construct other selves through homespaces, located at the intersection of (mis)recognition. Their (co)constructed internalised ideal of ‘academic talent’ is fraught with contradictions in the temporal flow of discursive themes in their life narratives, which account for how the intersections of ‘race’, class and gender locations coalesce into a “matrix of oppression” (Collins, 2002), positioning young black women as pawns in institutional and disciplinary spaces. The findings disentangle the mutually reinforcing relations between “epistemological access” (Morrow, 2007) and the dominant ideologies of whiteness and masculinity within STEM fields, which are in conflict with the participants’ backgrounds, thus contributing to their experiences of (c)overt discrimination, either through public humiliation, silencing of black women and/or the preferential treatment of white students from lecturers. The findings also indicate that these women resist systems of oppression through everyday homespaces in which they reconstruct new meanings and subjectivities through the narrative art that connect them to other spaces and to new “imagined communities” (Anderson, 1991). The significance of this study lies in its contribution to understanding personal and social change, particularly for marginalised groups that come to occupy positions of power in both the production of knowledge and the functioning of society.

Key terms: Transformation in higher education; Black women in STEM fields; Subjectivity and identity, Life narratives, Intersectionality; Belonging and alienation; ‘Imagined communities’; Space-time.