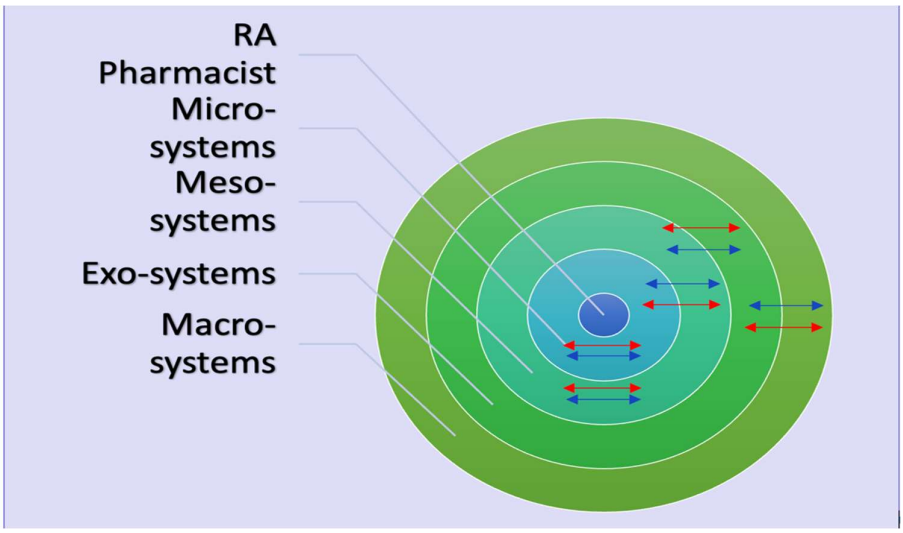
Note: This is Online Appendix 1 of Sekgalakane, K.M., Hlungwani, T.M. & Orchard, A., 2026, 'Barriers and enablers of work–life balance among regulatory affairs pharmacists working remotely in Gauteng, South Africa: A qualitative study', *Health SA Gesondheid* 31(0), a3184. https://doi.org/10.4102/hsag.v31i0.3184

Online Appendix 1



Source: Adapted from Hlungwani, T.M., 2015, 'Prevalence and predictors of psychosocial outcomes amongst socioeconomically deprived primary school children in a rural setting in South Africa: The role of ecological factors', PhD thesis, University of the Witwatersrand.

FIGURE 1-A1: Integration of Bronfenbrenner's Socio-Ecological Model and the Work-Life Harmony Model.

Central Circle (RA Pharmacist):
At the core of the diagram is the individual **RA Pharmacist**, representing the focal point of WLB experiences.

First Layer (Microsystem):
Represents the **immediate environment** of the pharmacist, such as family members, direct supervisors, and colleagues. Interactions here directly affect day-to-day WLB.

Second Layer (Mesosystem):
This layer illustrates the **interaction between the pharmacist's home life and work environment**, highlighting how conflicts or support systems arise from managing these dual roles.

Third Layer (Exosystem):
Representing the **organizational level**, this layer includes **remote work policies, managerial expectations**, and work culture, all of which can either hinder or enhance the WLB.
Fourth Layer (Macrosystem):
This broader layer represents **societal norms, professional expectations, and regulatory requirements**. These cultural and professional standards influence how WLB is perceived and managed.

Outer Layer (Chronosystem):
Enveloping the entire structure, this layer represents **time-based changes** such as pre-Covid, during Covid, and post-easing of Covid restrictions. It shows how evolving work policies and social expectations over time have impacted WLB.

Arrows for Work-Life Harmony and Conflict:
Blue Arrows (Work-Life Enrichment):
Positive dynamics between the pharmacist's roles (e.g., support from family, flexible work policies) that contribute to a balanced, harmonious relationship between work and home life.

Red Arrows (Work-Life Conflict):
These arrows indicate **tension points** between work and home responsibilities (e.g., family demands interfering with work expectations, long working hours). These conflicts arise in the interactions between layers such as the Microsystem and Mesosystem.

TABLE 1-A1: Integration of Bronfenbrenner's Socio-Ecological Model and the Work-Life Harmony Model in the Context of Remote Work for RA Pharmacists

Bronfenbrenner's Ecological System	Contextual Application to RA Pharmacists' Remote Work	Work-Life Harmony Themes
Chronosystem (Time)	The evolution of remote work policies over time: Pre-Covid-19, during Covid-19 restrictions, and post-Covid-19. Examine how changing timelines and the easing of restrictions have influenced RA pharmacists' work environment and personal responsibilities.	Work-Life Conflict: Changes over time may increase demands (extended hours) or facilitate balance (flexible schedules). Work-Life Enrichment: The time saved on commuting may allow more time for family or self-care.
Macrosystem (Cultural/Social Norms)	Broad cultural attitudes towards remote work and professional roles in South Africa, including the pharmaceutical sector's regulatory requirements. How does South African work culture influence expectations around productivity, flexibility, and well-being for RA pharmacists?	Work-Life Conflict: Social norms may pressure pharmacists to remain highly productive, even remotely. Work-Life Harmony: Positive cultural shifts towards valuing work-life balance may support remote work.
Exosystem (Organizational/Managerial Policies)	Influence of workplace policies (e.g., remote work policies, management expectations) on work-life balance. Organizational attitudes toward productivity, autonomy, and support for mental health and well-being for remote workers.	Work-Life Conflict: Policies that require extended availability may exacerbate work-life imbalance. Work-Life Enrichment: Supportive policies like flexible work hours or mental health days can foster a more balanced work-life experience.
Mesosystem (Interactions between Work and Family)	Interactions between home (family obligations) and work (colleague relationships, management expectations). How do RA pharmacists manage family responsibilities alongside professional roles?	Work-Life Conflict: Family responsibilities (e.g., caregiving) conflicting with work demands. Work-Life Enrichment: Positive interactions between home and work (e.g., supportive family, understanding managers) that facilitate better work-life balance.
Microsystem (Immediate Relationships)	Day-to-day interactions between RA pharmacists and their immediate environments: family members, supervisors, colleagues, direct reports, and children. Focus on how these direct relationships influence their ability to achieve balance.	Work-Life Conflict: Immediate relationships may cause friction if expectations (from family or managers) are too high. Work-Life Harmony: Strong family support or understanding from managers can enable pharmacists to achieve better balance and well-being.