

MULTI-LEVEL APPROACHES TO CHANGING BEHAVIOR FOR HIV PREVENTION AND AIDS CARE

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- Recent emphasis on and 'calls to action' to use social and structural determinants of HIV-related behavior
- Empirical research and interventions lag behind
- Ecological models seek to describe the multiple levels of influence on individual behavior, but receive little research attention.





The Challenge of Ecological Approaches

- 1. Assessing impact at multiple levels is often viewed as too difficult or too expensive.
- 2. Social-structural interventions are often diverse and context specific.
- 3. With randomized controlled trials (RCTs) viewed as the "gold standard," interventions addressing factors at multiple levels are often not approached because an RCT is not feasible or even appropriate.





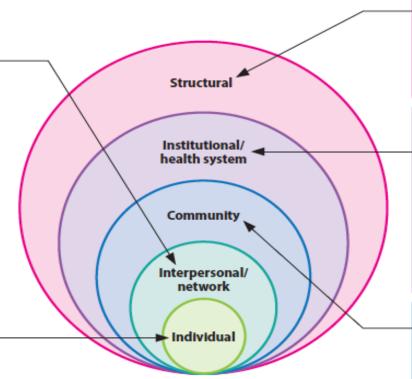
A Menu of Behavior Change **Factors**

Interpersonal/network

- relationship power and equity⁷⁷
- social support and trust (including families)51
- relationship satisfaction^{78,79}
- communication level⁷⁹
- relationship health/intimacy/interpersonal violence^{80,81}
- level of relationship commitment⁷⁸
- social networks/coalitions/capital[™]

Individual

- Knowledge/information^{38,39}
- risk perception⁴⁰⁻⁴²
- skills (condom use, negotiation, disclosure)43-46
- motivation^{47,48}
- emotions^{49,50}
- substance use⁵¹⁻⁵⁵
- denial of status^{51,52,56}
- intentions/readiness to change⁵⁷
- reactions to stress (coping)^{58,59}
- personal income (SES)^{\$1,53,56,60}
- physical health⁶¹
- distrust of healthcare⁶²
- fear of stigma^{51,56}
- self-efficacy (to adhere^{63,64}) prevent^{65,66})
- mental health status^{51,55}
- attitudes (towards condoms)^{67,68}
- perceived social norms⁶⁰
- perceived control^{12,70}
- personal beliefs (about treatment^{71,72})
- outcome expectancies72,74
- empowerment^{75,76}



Structural

- poverty^{102,104}
- access to services (infrastructure, transport)38,52,56,60,99,100
- cost of services, care¹⁰⁵
- political context and priorities^{106,107}
- funding for appropriate interventions¹⁰⁸
- education curriculum109
- public policy & laws (criminalization) of at-risk groups—MSM, IDUs, sex workers; national policies re: HIV intervention)34
- enforcement of laws110
- gender equity¹¹¹

Institutional/health system

- provision of appropriate services (e.g. harm reduction) 00
- competent, supportive providers⁹¹
- peer navigators/advisors 22-95
- · friendly, culturally competent environment 96,97
- convenient, responsive services \$5,56,60,98-100
- sufficient resourcing of services 57,55,60,99,101
- confidentiality/privacy 60,102
- service integration 52,55
- support tools (SMS, appt reminders)51,52,55,100

Community

- stigma³⁰
- peer pressure/social norms-multiple partners, gender roles, condom use⁸³
- community
- organization/mobilization^{BQS}
- -isms (racism⁸⁶, sexism⁸⁵,
- heterosexism 87)
- position of religious, cultural, opinion leaders^{80,88}
- cultural norms (e.g., masculinities,19)

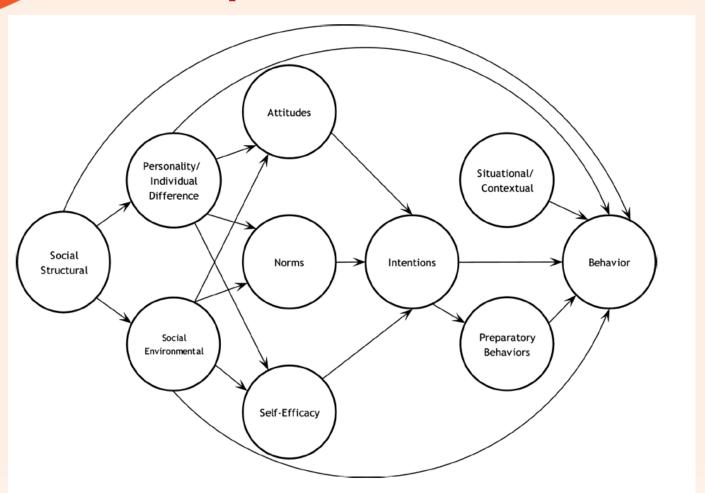


Individual-level behavior change models

Model	Description	Social emotional dimensions	Explaining structural influence
Social Cognitive	Individuals who have high self-efficacy to enact safe behaviors do, limited by barrier	May be relevant to the barriers individuals face	Epidemiological trends help identify risk groups, but no role for structural factors
Theories of Reasoned Action and Planned Behavior	Individuals intending to act safely do; perceived control over action (TPB) also facilitates action; other factors more distal	May be part of belief structure related to attitudes, subjective norms, and perceived control	structural factors' influence only indirect, mediated by impact on variables underlying intentions, no role for structural factors
Transtheoretical Model	Individuals who understand need to change, are ready to act safely, see benefits, are confident can change their behavior, limited by barriers	May be considered in relation to key variables but routinely omitted in measures	same individual level factors generalize across cultures, with some variability. Assessed support for social policies, but no clear role for structural factors
Information- Motivation- Behavioral Skills Model	Individuals who have correct information, sufficient motivation, behavioral skills act safely	May be part of the motivational deficits individuals experience	Epidemiological trends help identify risk groups, but no role for structural factors



Multiple Domain Model

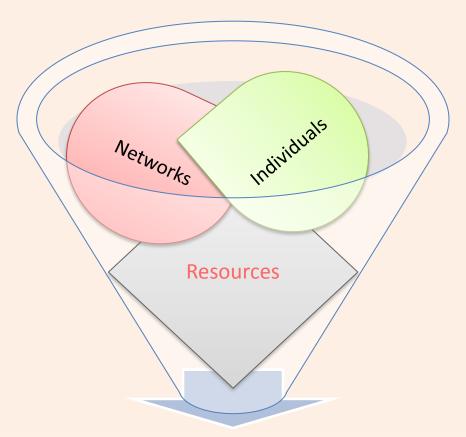


Zimmerman RS, Noar SM, Feist-Price S, et al. Longitudinal test of a multiple domain model of adolescent condom use. *J Sex Res.* Nov 2007;44(4):380-394.





Network-Individual Resource Model

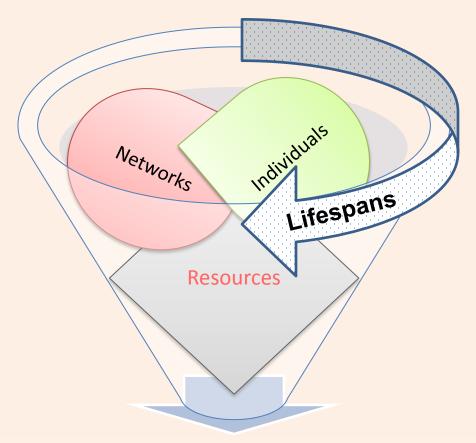


HIV risk and AIDS care





Network-Individual Resource Model

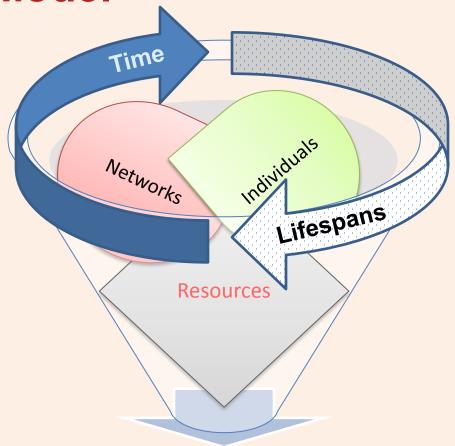


HIV risk and AIDS care





Network-Individual Resource Model

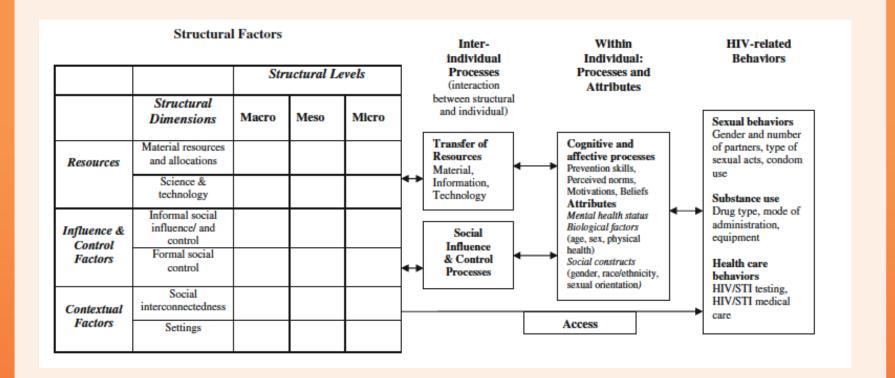


HIV risk and AIDS care





Dynamic Social Systems Model







How can communication take multiple levels of behavior change factors into account?

- 1. When trying to understand behavior change or develop an intervention, consider all levels of influence and related variables from individual to structural.
- 2. Where possible, consult with colleagues familiar with levels of measurement and understanding different from yours.





How can communication take multiple levels of behavior change factors into account?

- 3. Choose at least 2 levels to measure, test, and/or include in an intervention.
- 4. Where possible, combine already existing theories at the various levels rather than creating brand-new theories, until such time as a new theory is clearly indicated.
- 5. Consider the scalability and sustainability of an intervention.





Conclusion

- Health communication can be used at multiple levels—individual counseling, changing social norms, community mobilization, advocacy, etc.
- Communication must be supported by influences at other levels (sufficient services, infrastructure, supportive environment, etc.)
- Implementing partners/researchers/interventionists must challenge themselves to take multiple levels of influence into account when designing communication interventions.



QUESTIONS

