

The active ingredients of technology transfer: Activities and strategies that promote the adoption of evidence-based practices

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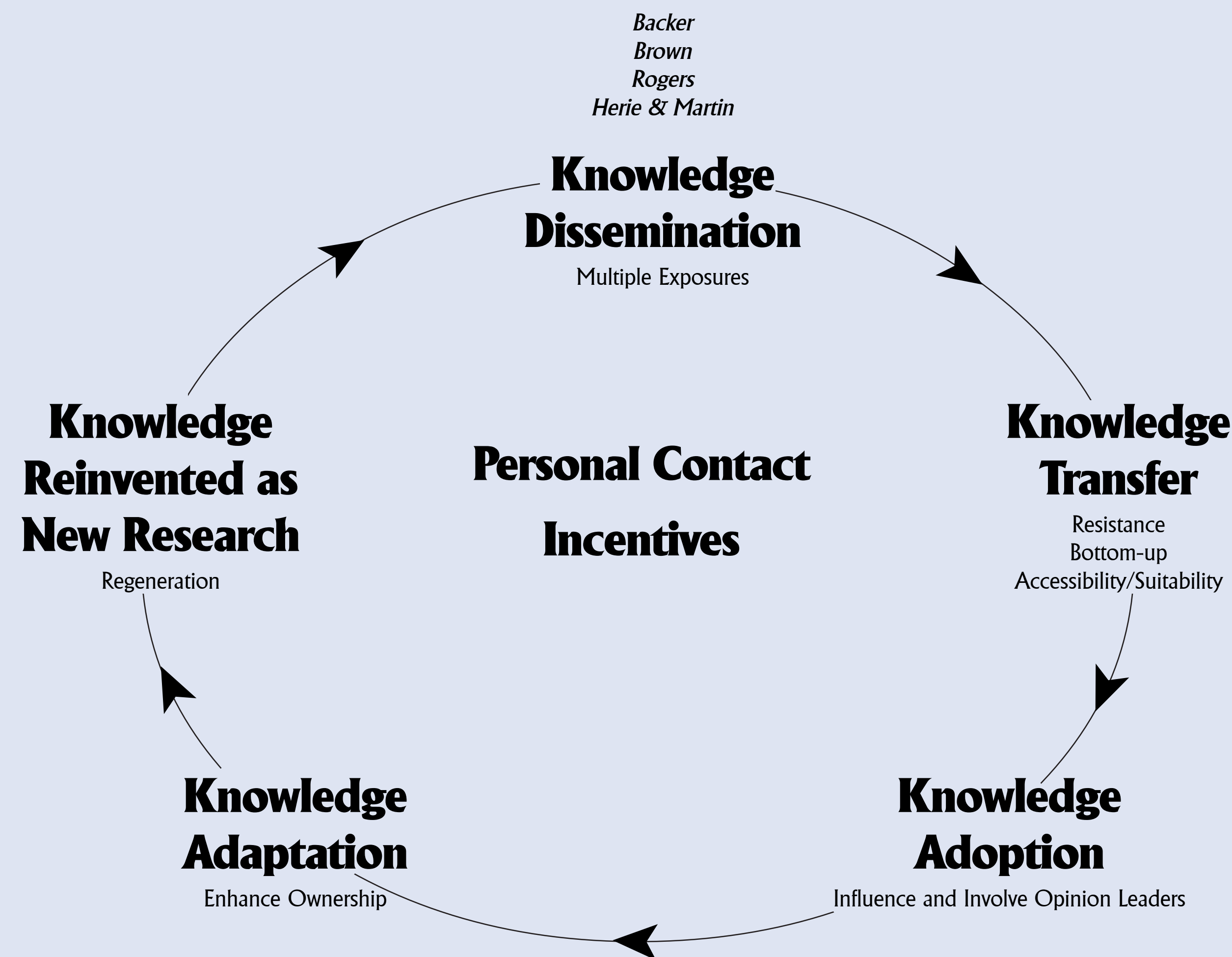
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Technology Transfer Cycle

Abstract

According to Brown (2000), in order for technology transfer activities in the substance abuse treatment field to be successful, both counselor behavior and cognition must be impacted. Given this, researchers, policy makers, educators, and providers must possess a strong knowledge base of the technology transfer research and literature when planning dissemination and adoption efforts. While the technology transfer literature is robust, there is a scarcity of writings on the common themes found in this literature thus making the application of the literature difficult. This presentation will provide a review of the technology transfer literature, identify the active ingredients of technology transfer, and apply them to activities and strategies utilized to promote the adoption of evidence-based practices. The nine active ingredients needed to promote the adoption of a new practice or behavior will be highlighted. These include: 1) focus on bottom-up strategies, 2) deal with resistance, 3) provide multiple exposures, 4) ensure accessibility and suitability, 5) influence and involve opinion leaders, 6) enhance ownership, 7) increase personal contact, 8) provide rewards, and 9) utilize regeneration strategies. Authors will provide concrete examples of technology transfer activities that utilize these nine active ingredients.



Technology Transfer Ingredients	Activities and Strategies
Include Bottom-up Perspectives	Front-line staff are members of change teams
Deal with Resistance	Focus and process groups that address changes associated with innovation (reflective learning journals)
Provide Multiple Exposures	Exposures to the technologies in various modes e.g., workshops, online and CD-ROM courses
Ensure Accessibility/Suitability	Materials in various modes, that are designed to fit in briefcases/backpacks and that use real-life experiences. (Technology is portable, user-friendly, and based on adult learning principles)
Influence and Involve Opinion Leaders	Peer-led expert clinical groups help opinion leaders diffuse innovation
Enhance Ownership	Clinical guides, reviews of the literature and meetings with other providers that use technology. (Provide credible evidence that innovation is worth using)
Increase Personal Contact with Innovation	Onsite technical assistance with innovator – Toll-free telephone consultations
Provide Rewards (incentives)	Continuing education credits, gift certificates, paid leave/tuition, lunches
Utilize Regeneration Strategies	Practitioner/researcher collaboratives, formal or informal, live or virtual

Provide Multiple Exposures

Backer et al. (1986)
Brown (1987)
Backer (1988)
Backer (1998)
Halpern (1998)
Backer (2000)
O'Farrell & Fals-Stewart (2000)
Saitz (2000)
Backer (2003)
Di Noia et al. (2003)
Knudsen & Roman (2004)
McCarty et al. (2004)
Shafer, Rhode & Chong (2004)

Deal with Resistance

Diamond (1996)
Addis (1999)
Keller & Galanter (1999)
Andrzejewski et al. (2001)
Forman, Bovasso, & Woody (2002)
Backer (2000)
Foman et al. (2002)
Liddle et al. (2002)
Marinelli-Casey et al. (2002)
Milne & Roberts (2002)
Morgenstern (2002)
Brown (2004)

Include Bottom-up Perspectives

Sorenson & Guydish (1991)
Backer (1995)
Kavanagh (1995)
Diamond (1996)
Sobell (1996)
Fals-Stewart & Birchler (2001)
Addis (2002)
Hogan (2002)
Campbell, Catling, & Melchert (2003)
Di Noia et al. (2003)
Gregrich (2003)
Shafer, Rhode, Chong (2004)

Ensure Accessibility/Suitability

Morrissey et al. (1997)
Cunningham et al. (2000)
Ferrence (2001)
Godley et al. (2001)
Hawley & Weisz (2002)
Sloboda & Schidhaus (2002)
Soriano & Baugh (2002)
Campbell, Catling, & Melchert (2003)
Di Noia et al. (2003)
Gregrich (2003)
Shafer, Rhode, Chong (2004)

Influence and Involve Opinion Leaders

Rogers (1995)
Rogers (1995)
Valente & Davis (1999)
Change Book (2000)
Ling & Smith (2002)
Petty & Simcic (2002)
Robbins et al. (2002)
Thomas (2003)
Richards et al. (2003)

Enhance Ownership

Kavanagh (1995)
Brown (1998)
Brown (2000)
Ling & Smith (2002)
Petty & Simcic (2002)
Robbins et al. (2002)
Thomas (2003)
Richards et al. (2003)

Increase Personal Contact with Innovation

Stevens & Tomatzky (1980)
Backer et al. (1986)
Brown & Backer (1988)
Sorenson et al. (1988)
Nurco & Hanlon (1996)
Milne et al. (1999)
Cunningham et al. (2000)
Herie & Martin (2002)
Spear & Rawson (2002)
Carroll et al. (2002)
Richards et al. (2003)
Baer et al. (2004)

Provide Rewards Incentives/ Compensation

Backer (1995)
Mager & Pipe (1997)
Andrzejewski et al. (2001)
Rawson & Branch (2002)

From the Bench... To the Trench

From the Trench... To the Bench Regeneration

Altman (1995)
Sobell (1996)
Cross (1999)
Wolfe (1999)
Addis (2002)
Carroll et al. (2002)
Clark et al. (2002)
Crane & Hafen (2002)
Herie & Martin (2002)
Hogan (2002)
Petty & Simcic (2002)
Rawson et al. (2002)
Rogers (2004)