**Additional File 3.** The Theoretical Domains Framework (TDF) with definitions and component constructs

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| **TDF domain** | **TDF domain** | **Component constructs** |
| **1. Knowledge** | An awareness of the existence of something | Knowledge (including knowledge of conditions/scientific rationale)Procedural knowledgeKnowledge of task environment |
| **2. Skills** | An ability or proficiency acquired through practice | SkillsSkills developmentCompetenceAbilityInterpersonal skillsPracticeSkill assessment |
| **3. Social/Professional Role and Identity** | A coherent set of behaviors and displayed personal qualities of an individual in a social or work setting | Professional identityProfessional roleSocial identityIdentityProfessional boundariesProfessional confidenceGroup identityLeadershipOrganizational commitment |
| **4. Beliefs about Capabilities** | Acceptance of the truth, reality or validity about an ability, talent or facility that a person can put to constructive use | Self-confidencePerceived competenceSelf-efficacyPerceived behavioral controlBeliefsSelf-esteemEmpowermentProfessional confidence |
| **5. Optimism** | The confidence that things will happen for the best or that desired goals will be attained | OptimismPessimismUnrealistic optimismIdentity |
| **6. Beliefs about Consequences** | Acceptance of the truth, reality or validity about outcomes of a behavior in a given situation | BeliefsOutcome expectanciesCharacteristics of outcomeexpectanciesAnticipated regretConsequents |
| **7. Reinforcement** | Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus | Rewards (proximal/distal, valued/notvalued, probable/improbable)IncentivesPunishmentConsequentsReinforcementContingenciesSanctions |
| **8. Intentions** | A conscious decision to perform a behavior or a resolve to act in a certain way | Stability of intentionsStages of change modelTrans-theoretical model and stages of change |
| **9. Goals** | Mental representations of outcomes or end states that an individual wants to achieve | Goals (distal/proximal)Goal priorityGoal/target settingGoals (autonomous/controlled)Action planningImplementation intention |
| **10. Memory, Attention and Decision Process** | The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives | MemoryAttentionAttention controlDecision makingCognitive overload/tiredness |
| **11. Environmental Context & Resources** | Any circumstance of a person’s situation or environment that discourages or encourages the development of skills and abilities, independence, social competence and adaptive behavior | Environmental stressorsResources/material resourcesOrganizational culture/climateSalient events/critical incidentsPerson × environment interactionBarriers and facilitators |
| **12. Social Influences** | Those interpersonal processes that can cause individuals to change their thoughts, feelings or behaviors | Social pressureSocial normsGroup conformitySocial comparisonsGroup normsSocial supportPowerIntergroup conflictAlienationGroup identityModelling |
| **13. Emotion** | A complex reaction pattern, involving experiential, behavioral, and physiological elements, by which the individual attempts to deal with a personally significant matter or event | FearAnxietyAffectStressDepressionPositive/negative affectBurn-out |
| **14. Behavioral Regulation** | Anything aimed at managing or changing objectively observed or measured actions. | Self-monitoringBreaking habitAction planning |

TDF = Theoretical Domains Framework

Reference:

Atkins L, Francis J, Islam R, O'Connor D, Patey A, Ivers N, et al. A guide to using the Theoretical Domains Framework of behaviour change to investigate implementation problems. Implement Sci. 2017;12(1):77