How Do Traits and Dispositional Constructs Relate to Intention and Behavior in Social Cognition Theories? The Trait-Informed Attitude, Cognition, and Intention Tenet (TACIT)

Martin S. Hagger^{1,2,3}

¹Department of Psychological Sciences and Health Sciences Research Institute, University of California,

Merced, USA

²Faculty of Sport and Health Sciences, University of Jyväskylä, Finland ³School of Applied Psychology, Griffith University, Australia

Author Note

Correspondence concerning this manuscript should be addressed to Martin S. Hagger, Social and Health Psychology Behavioral Research for Prevention and Promotion (SHARPP) Lab, Department of Psychological Sciences and Health Sciences Research Institute, University of California, Merced, 5200 N. Lake Rd., Merced, CA 95343, USA, email: mhagger@ucmerced.edu
The author declares no competing interests.

Author contributions: Martin S. Hagger: Conceptualization, Methodology, Investigation, Writing – Original draft, Writing – Review and editing.

Abstract

I propose a mechanism by which trait or dispositional constructs, such as intrapersonal constructs (e.g., traits from factor models of personality such as conscientiousness and extroversion), other trait-like constructs (e.g., trait self-control, health literacy, and political beliefs), and perceptions or interpretations of social structure (e.g., income, education, and socioeconomic status), relate to subsequent intentions toward, and actual performance of, a future target behavior. The mechanism builds on prior generalized proposals put forward by the original proponents and advocates of the social cognition theories that have been typically used to predict behavior and provide insight into the mechanisms involved. I begin with a broad overview of social cognition theories, often referred to as reasoned action or rationale decision theories, and their general assumptions, predictions, commonalities, and evidence base. Next, I propose, and formally state, the current mechanism in which trait and dispositional constructs relate to intentions and subsequent behavior indirectly through the mediation of the sets of belief-based social cognition constructs that are proximally antecedent to intentions and behavior. Building on original social cognition theory proposals, I emphasize the informational function of the traits and dispositions with respect to belief and intention formation, and how this leads individuals' to accordingly align their beliefs to be trait-consistent, as explanations for the proposed mechanism. I also outline the nascent research in the field that offers preliminary evidence in support of the mechanism, and highlight some caveats and avenues for future research. Finally, I assign a candidate a label to the mechanism: a traitinformed attitude, cognition, and intention tenet (TACIT).

Social Cognition Theories of Intentional Behavior: Origins, Assumptions, and Predictions

Social cognition theories of intentional behavior or decision making, sometimes referred to as reasoned action or rational decision theories, collectively represent a leading approach to the prediction of individuals' intention or motivation toward, and actual performance of, actions and behaviors in social contexts (Bandura, 1986; Conner & Norman, 2015a; Fishbein et al., 2001; Hagger, 2025). The theories adopt fundamental premises from the social cognition perspective, and the field of social psychology more broadly, including an information processing metaphor of decision making, and assumptions that individuals can reliably report their internal states and that behavior is eminently predictable given sufficient account of the individual (e.g., cognitive and emotional perceptions) and extraneous (e.g., demographic characteristics, environmental factors) variables that serve as behavioral determinants (for reviews see Frith & Frith, 2012; Schneider, 1991; Sherman et al., 1989). Their purpose is to provide sufficient and viable descriptions of behavior through formal specification of the social psychological constructs that represent mental processes and serve as determinants of individuals' intentions and behaviors across multiple populations and social contexts, with concomitant specification of the mechanisms involved (Armitage & Conner, 2000; Fishbein & Ajzen, 1975, 2010).

Intention is a focal behavioral determinant common to these theories. Intention is conceptualized as a psychological construct that represents the intensity of individuals' motivation to perform a given target behavior in future to fulfil an outcome or goal. In essence, intention captures the degree of effort and resources that individuals are prepared to invest in performing the behavior in future. Many social cognition theories conceptualize intention, or similar motivational constructs representing a propensity to act, as the preeminent behavioral determinant (e.g.,Ajzen, 1991; Ajzen & Fishbein, 1980; Bandura, 1977; Kanfer, 1970; Rogers, 1975; Triandis, 1977). Accordingly, individuals' behavioral intentions are proposed to be a function of their evaluative judgments with respect to its future performance, represented by social cognition constructs that capture in their stated beliefs with respect to the upcoming behavioral performance. The beliefs are knowledge structures that summarize processed information concerning to behavioral performance based on current circumstance and stored information

derived from prior experience. Typical social cognition theories have identified (e.g., Ajzen, 1991; Bandura, 1977; Fishbein & Ajzen, 2010; Rogers, 1975; Rosenstock, 1974), and explicitly distinguished between (e.g., Trafimow & Duran, 1998; Trafimow & Fishbein, 1995; Trafimow & Sheeran, 1998), social cognition constructs that represent sets of individuals' utility and anticipated affect-related, social influence and normative, and control-related or personal capacity beliefs (for reviews see Abraham & Sheeran, 2000; Albarracín et al., 2024; Hagger, 2025; McMillan & Conner, 2007; Sheeran et al., 2017). These reflect 'core' sets of beliefs, with social cognition constructs such as attitudes or outcome expectations, injunctive or descriptive norms, and perceived control or self-efficacy specified as prototypical constructs that represent the utility, normative, and capacity belief sets, respectively. A key premise of the theories is that these social cognition constructs serve as key determinants of the most immediate or proximal behavioral determinant, behavioral intentions (Ajzen & Fishbein, 1980; Bandura, 1977; Fishbein & Ajzen, 2010; Rogers, 1975; Triandis, 1977). Intention, therefore, serves as the salient mechanism by which the belief-based cognition constructs beliefs determine behavior.

A substantive research literature testing the predictions of social cognition theories, including 'content-free', such as social cognitive theory (Bandura, 1977, 1986), the theories of reasoned action and planned behavior, and the theory of interpersonal behavior (Triandis, 1977) and 'content-specific', such as the health belief model (Rosenstock, 1974) and protection motivation theory (Rogers, 1975), theories has been established (Ajzen, 1998). Such tests have adopted multiple methods to test theory predictions, that is, associations between, or effects of, the belief-based social cognition constructs on behavior intention, intentions on behavior, and the social cognition constructs on subsequent behavior mediated by intention (for overviews see Albarracín, 2021; Conner & Norman, 2015b; Dekker, 2008). For example, studies have adopted psychometric survey methods to capture individuals' beliefs and intentions, or utilized message- or communication-based manipulations of individuals' beliefs to represent the core belief-based determinants, in longitudinal correlational and experimental or intention designs, respectively, with appropriate follow-up measures of behavioral performance (for a review, see Hagger, 2019). Meta-analytic reviews of research applying these theories in multiple behavioral domains

have leveraged synthesized data from these studies to summarize the weight available evidence supporting theory predictions, and have indicated that the theories account for non-trivial variance in intentions and behaviors across populations, contexts, and behaviors and concluded that the theories provide viable, sufficient, fit-for-purpose descriptions of behavioral determinants and the processes involved (e.g., Albarracín et al., 2001; Carpenter, 2010; Hagger & Hamilton, 2024a; McEachan et al., 2011; Milne et al., 2000; Sheeran et al., 2016; Steinmetz et al., 2016). The research has provided valuable insights into behavioral determinants and associated processes, and have also provided guidance on the development of, and strategies employed in, interventions purposed to change behavior (Conner & Norman, 2015b; Hagger et al., 2020).

Trait or Dispositions in Social Cognition Theories: Rationale for, and Specification of, a Proposed Mechanism

An important ongoing concern arising from theory and research adopting social cognition theories is the role that extraneous variables such as intrapersonal beliefs and representations, captured by individual differences in trait (or 'trait like') or dispositional constructs, and other environmental or broader variables related to perceived social structure, have when it comes to predicting individuals' intentions and behavior. The traits or dispositions encompass generalized, stable, and enduring psychological constructs that capture individuals' characteristic patterns of cognition, response, and action across contexts and behaviors. Prototypical examples include personality traits from factor models of personality (e.g., Ashton et al., 2004; Costa & McCrae, 1992) and other trait-like constructs such as self-control (Hagger & Hamilton, 2024b) and health literacy (Liu et al., 2020), but also sociostructural variables such an income, educational level, or socioeconomic status (Schüz, 2017)\frac{1}{2}.

Accordingly, a broad, generalized prediction or auxiliary set of assumptions of social cognition theories is that extraneous variables, that encompasses traits and dispositional constructs, serve as sources of information on which individuals explicitly or implicitly partially rely when forming their intentions to

¹It is important to note that it is individuals' perceptions or interpretation of their social environment that is essential to guiding their intentions to perform future behavior rather than actual social environmental constructs.

perform behaviors in future (Ajzen, 1991; Ajzen & Fishbein, 1980). In the current mechanism, I not only reify this generalized prediction in a specific, formal model (Borsboom et al., 2021), but also provide accompanying mechanistic explanation for its components (van Rooij & Baggio, 2021).

Specifically, building on the general premises promulgated by social cognition theorists (Ajzen, 1991; Ajzen & Fishbein, 1980), I predict indirect effects of trait or dispositional constructs on individuals' subsequent performance of a future target behavior mediated by individuals' beliefs with respect to performing the behavior (represented by the prototypical, core constructs from social cognition theories) and intentions. The explanatory basis of this mechanism is the informational function, or generalized biasing effect, of traits on individuals' decision making — social cognition constructs that summarize individuals' beliefs with respect to behavioral performance are proposed to be partially informed by individuals' intrapersonal traits and social environment. Importantly, given that individuals' behavior is subject to the influence of multiple traits, dispositional constructs, and 'trait-like' variables related to social structure, the mechanism is expected to be applicable to a range of trait and dispositional constructs, and of relevance to multiple populations, contexts, and behaviors.

From a conceptual perspective, the trait or dispositional constructs function in social cognition theories as generalized tendencies that affect or 'bias' individuals' beliefs and, by extension, their intentions toward, and actual performance of, subsequent behaviors (Ajzen, 1991; Ajzen & Fishbein, 1980). Specifically, individuals are expected to demonstrate generalized tendencies to align their beliefs with respect to future behavioral performance with their generalized traits. Consistent with the broad evidence testing effects of dispositional constructs on responses, behaviors, and other salient outcomes (e.g., Roberts & Yoon, 2022; Strickhouser et al., 2017), effects of dispositions on individuals' beliefs are anticipated to be pervasive but generally small in size relative to effects of contextual and situational influences. This is congruent with the premise that traits are indicated by a density of trait-consistent states, including beliefs, responses, and behaviors (Fleeson, 2001; Jones et al., 2017). In the proposed mechanism, I extend this premise to the beliefs underpinning subsequent behavior, hence a density of trait-consistent beliefs that serve as the precursors of intentions and behaviors. Taken together,

individuals' beliefs and intentions are proposed as a candidate mechanism by which individuals' traits and individual differences are implicated in their formation of intentions toward, and subsequent enactment of, future behavior. Empirically, the social cognition constructs and intentions should function as sequential mediators of the effects of dispositional or trait-like constructs on behavioral performance.

The proposed mechanism-related pattern of effects among trait or dispositional constructs, belief-based constructs from social cognition theories, intentions or motivation, and subsequent behavior has been hypothesized and, subsequently, tested in studies adopting a number of social cognition theories, and across multiple behaviors, populations, and contexts. For example, primary and metaanalytic studies have tested the model with personality traits such as conscientiousness or extroversion (e.g., Bogg & Milad, 2020; Bogg et al., 2025; Conner & Abraham, 2001; Hoyt et al., 2009; Phillips et al., 2003; Wollast et al., 2025), and other trait-like constructs such as trait self-control (Conner et al., 2023; Hagger et al., 2019; Hagger et al., 2025; Hankonen et al., 2014), health literacy (McAnally & Hagger, 2023), and political beliefs (Bogg et al., 2023; Griffith et al., 2024; Wollast et al., 2025), as the focal dispositional construct. More broadly, the approach has also been applied to constructs related to the social structure, such as education, income, and socio-economic status (Godin et al., 2010; Hagger & Hamilton, 2021). Recently, theorists and researchers have assigned labels to refer to, and characterize, this mechanistic model. Broadly, the model can be labelled a Trait-informed Attitude, Cognition, and Intention Tenet (TACIT). This is a precise, descriptive label that embellishes prior labels such as the disposition-belief-motivational model (Bogg et al., 2023) and the value-based pathway (Conner et al., 2023), as it not only makes explicit the mechanism itself and its key components, but also specifies an empirically-testable tenet or hypothesis.

The TACIT-based mechanism is illustrated in Figure 1. The figure adopts conventions of the acyclic figures commonly used to represent causal models in psychology (Poppe et al., 2024) and those of modeling diagrams purposed provide direct congruence between specific theory-stipulated hypotheses and the formal analytic procedures typically employed to test them (Hayes, 2016). The

figure summarizes the proposed mechanism by which trait or dispositional constructs inform individuals' beliefs, intentions toward, and actual performance of a future target behavior in full, with annotations to describe its key features. Importantly, each unidirectional arrow represents a specific component hypothesis of the nomological network of associations among constructs and outcomes that make up the mechanism. Confirmation or rejection of each hypothesis within the network is, therefore, necessary for the proposed mechanism to be accepted as viable. Accordingly, the key constructs (illustrated as the colored rectangles), directional relations or effects (illustrated as unidirectional arrows), and sequential mediation process (illustrated by the unidirectional arrows passing through rectangles representing the serial mediators, namely, social cognition and intention constructs), that characterize the full TACIT are represented.

Finally, some caveats of the proposed TACIT-informed mechanism should be acknowledged. First, currently available empirical tests of the proposed mechanisms almost exclusively rely on correlational data. Even though such data may be informative of certain conditions that need to be met for causal effect (e.g., Dul, 2016), they do not provide a strong basis for causal inference (e.g., Rohrer et al., 2022). Research studies that adopt fit-for-purpose experimental or quasi-experimental designs to test the proposed mediational mechanism are a future research imperative (e.g., Bullock & Green, 2021). Second, while TACIT-informed effects represent a candidate mechanism by which dispositional constructs relate to behavior, studies have observed residual behavioral effects of dispositions independent of the social cognition-mediated effect (e.g., Bogg & Milad, 2020; Hagger et al., 2025). Partial mediation indicates that other processes may be implicated in the effect of traits and dispositions on behavior and future studies should seek to identify other candidate mediators that represent these processes. Candidates include constructs from dual process theories (e.g., Strack & Deutsch, 2004) that represent implicit or non-conscious processes, which reflect more spontaneous or habitual behavioral patterns that can be activated independent of the reasoned decision making processes that the social cognition and intention-mediated effects in the proposed mechanism represent (Hagger, 2016; Sheeran et al., 2013).

Conclusion

A mechanism by which trait or dispositional constructs, such as individual difference constructs that represent intrapersonal tendencies (e.g., personality traits and other trait-like constructs such as self-control and health literacy), and perceptions related to individuals' social structure (e.g., income, education, socioeconomic status), on subsequent intentions toward, and actual performance of, future behavior in the context of social cognition theories is proposed. The mechanism is in keeping with the generalized conceptual proposals that complemented the original expositions of social cognition theories (e.g., Ajzen, 1991; Ajzen & Fishbein, 1980) that proposed indirect relations between extraneous variables such as traits and dispositions on behaviors. In the current mechanism, I have embellished these original proposals by providing formal specification of predictions outlining the function of traits and dispositions in social cognition theories and offering accompanying conceptual explanations of the psychological processes involved. Finally, in the TACIT acronym, I provide a formal candidate label for the mechanism.

References

- Abraham, C., & Sheeran, P. (2000). Understanding and changing health behaviour: From health beliefs to self-regulation. In P. Norman, C. Abraham & M. T. Conner (Eds.), *Understanding and changing health behaviour: From health beliefs to self-regulation* (1st ed., pp. 3–24). Harwood Academic Publishers. https://doi.org/10.4324/9781315080055
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T
- Ajzen, I. (1998). Models of human social behavior and their application to health. *Psychology and Health*, *13*, 735-739. https://doi.org/https://doi.org/10.1080/08870449808407426
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Prentice Hall.
- Albarracín, D. (2021). Action and inaction in a social world: Predicting and changing attitudes and behaviors. Cambridge University Press.
- Albarracín, D., Fayaz-Farkhad, B., & Granados Samayoa, J. A. (2024). Determinants of behaviour and their efficacy as targets of behavioural change interventions. *Nature Reviews Psychology*, *3*, 377–392. https://doi.org/10.1038/s44159-024-00305-0
- Albarracín, D., Johnson, B. T., Fishbein, M., & Muellerleile, P. A. (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis. *Psychological Bulletin*, *127*(1), 142-161. https://doi.org/10.1037/0033-2909.127.1.142
- Armitage, C. J., & Conner, M. (2000). Social cognition models and health behaviour: A structured review. *Psychology and Health*, *15*, 173-189. https://doi.org/10.1080/08870440008400299
- Ashton, M. C., Lee, K., Perugini, M., Szarota, P., de Vries, R. E., Di Blas, L., Boies, K., & De Raad, B. (2004). A six-factor structure of personality-descriptive adjectives: Solutions from psycholexical studies in seven languages. *Journal of Personality and Social Psychology*, 86(2), 356-366. https://doi.org/10.1037/0022-3514.86.2.356
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215. https://doi.org/10.1037/0033-295X.84.2.191

- Bandura, A. (1986). Social foundations of thought and action: A social-cognitive theory. Prentice-Hall.
- Bogg, T., & Milad, E. (2020). Demographic, personality, and social cognition correlates of coronavirus guideline adherence in a U.S. sample. *Health Psychology*, *39*(12), 1026-1036. https://doi.org/10.1037/hea0000891
- Bogg, T., Milad, E., & Godfrey, O. (2023). COVID-19 vaccine intention: Prospective and concurrent tests of a disposition-belief-motivation framework. *Health Psychology*, 42(8), 521-530. https://doi.org/10.1037/hea0001200
- Bogg, T., Milad, E., & Godfrey, O. (2025). A disposition-belief-motivation framework for COVID-19 boosters: Prospective tests in a U.S. sample. *Health Psychology*, *44*(11), 1039-1048. https://doi.org/10.1037/hea0001526
- Borsboom, D., van der Maas, H. L. J., Dalege, J., Kievit, R. A., & Haig, B. D. (2021). Theory construction methodology: A practical framework for building theories in psychology. *Perspectives on Psychological Science*, 16(4), 756-766.

 https://doi.org/10.1177/1745691620969647
- Bullock, J. G., & Green, D. P. (2021). The failings of conventional mediation analysis and a design-based alternative. *Advances in Methods and Practices in Psychological Science*, *4*(4). https://doi.org/10.1177/25152459211047227
- Carpenter, C. J. (2010). A meta-analysis of the effectiveness of health belief model variables in predicting behavior. *Health Communication*, 25(8), 661-669.

 https://doi.org/10.1080/10410236.2010.521906
- Conner, M. T., & Abraham, C. (2001). Conscientiousness and the theory of planned behavior: Toward a more complete model of the antecedents of intentions and behavior. *Personality and Social Psychology Bulletin*, 27(11), 1547-1561. https://doi.org/10.1177/01461672012711014
- Conner, M. T., & Norman, P. (2015a). Predicting and changing health behaviour: A social cognition approach. In M. T. Conner & P. Norman (Eds.), *Predicting and changing health behaviour:*Research and practice with social cognition models (3rd ed., pp. 1-29). Open University Press.

- Conner, M. T., & Norman, P. (2015b). *Predicting and changing health behaviour: Research and practice with social cognition models* (3rd ed.). Open University Press.
- Conner, M. T., Wilding, S., Wright, C. E., & Sheeran, P. (2023). How does self-control promote health behaviors? A multi-behavior test of five potential pathways. *Annals of Behavioral Medicine*, *57*(4), 313–322. https://doi.org/10.1093/abm/kaac053
- Costa, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences*, 13(6), 653-665. https://doi.org/10.1016/0191-8869(92)90236-I
- Dekker, J. (2008). Theories in behavioral medicine. *International Journal of Behavioral Medicine*, 15, 1-3. https://doi.org/10.1007/BF03003067
- Dul, J. (2016). Necessary condition analysis (NCA): Logic and methodology of "necessary but not sufficient" causality. *Organizational Research Methods*, 19(1), 10-52.
 https://doi.org/10.1177/1094428115584005
- Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behavior. Addison-Wesley.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*.

 Psychology Press. https://doi.org/10.4324/9780203838020
- Fishbein, M., Triandis, H. C., Kanfer, F. H., Becker, M., Middlestadt, S. E., & Eichler, A. (2001).

 Factors influencing behavior and behavior change. In A. Baum, T. A. Revenson & J. E. Singer (Eds.), *Handbook of Health Psychology* (pp. 3-17). Lawrence Erlbaum.
- Fleeson, W. (2001). Toward a structure- and process-integrated view of personality: Traits as density distributions of states. *Journal of Personality and Social Psychology*, 80(6), 1011–1027. https://doi.org/10.1037/0022-3514.80.6.1011
- Frith, C. D., & Frith, U. (2012). Mechanisms of social cognition. *Annual Review of Psychology*, 63, 287-313. https://doi.org/10.1146/annurev-psych-120710-100449
- Godin, G., Sheeran, P., Conner, M., Belanger-Gravel, A., Gallani, B. J., & Nolin, B. (2010). Social structure, social cognition, and physical activity: A test of four models. *British Journal of Health Psychology*, 15(1), 79-95. https://doi.org/10.1348/135910709x429901

- Griffith, Z. M., Polet, J., Lintunen, T., Hamilton, K., & Hagger, M. S. (2024). Social cognition, personality and social-political correlates of health behaviors: Application of an integrated theoretical model. *Social Science and Medicine*, 347, 116779.
 https://doi.org/10.1016/j.socscimed.2024.116779
- Hagger, M. S. (2016). Non-conscious processes and dual-process theories in health psychology. *Health Psychology Review*, 10(4), 375-380. https://doi.org/10.1080/17437199.2016.1244647
- Hagger, M. S. (2019). The reasoned action approach and the theories of reasoned action and planned behavior. In D. S. Dunn (Ed.), *Oxford Bibliographies in Psychology*. Oxford University Press. https://doi.org/10.1093/OBO/9780199828340-0240
- Hagger, M. S. (2025). Psychological determinants of health behavior. *Annual Review of Psychology*, 76, 821-850. https://doi.org/10.1146/annurev-psych-020124-114222
- Hagger, M. S., Cameron, L. D., Hamilton, K., Hankonen, N., & Lintunen, T. (2020). Changing behavior: A theory- and evidence-based approach. In M. S. Hagger, L. D. Cameron, K. Hamilton, N. Hankonen & T. Lintunen (Eds.), *The handbook of behavior change* (pp. 1-14). Cambridge University Press. https://doi.org/10.1017/97811086773180.001
- Hagger, M. S., & Hamilton, K. (2021). Effects of socio-structural variables in the theory of planned behavior: A mediation model in multiple samples and behaviors. *Psychology & Health*, *36*(3), 307-333. https://doi.org/10.1080/08870446.2020.1784420
- Hagger, M. S., & Hamilton, K. (2024a). Longitudinal tests of the theory of planned behaviour: A metaanalysis. *European Review of Social Psychology*, *35*(1), 198-254. https://doi.org/10.1080/10463283.2023.2225897
- Hagger, M. S., & Hamilton, K. (2024b). Trait self-control as a determinant of health behavior: Recent advances on mechanisms and future directions for research. *Current Opinion in Psychology*, 60, 101887. https://doi.org/10.1016/j.copsyc.2024.101887
- Hagger, M. S., Hankonen, N., Kangro, E.-M., Lintunen, T., Pagaduan, J., Polet, J., Ries, F., & Hamilton, K. (2019). Trait self-control, social cognition constructs, and intentions: Correlational evidence for

- mediation and moderation effects in diverse health behaviors. *Applied Psychology: Health and Well-Being, 11*(3), 407-437. https://doi.org/10.1111/aphw.12153
- Hagger, M. S., Sas, S. V., Balla, J., Benoit, T., Majeed, R., Primoceri, P., Smith, S. R., & Hamilton, K. (2025). *Trait self-control and health behavior: Meta-analysis and test of a mediational model*. from https://doi.org/10.17605/OSF.IO/WCYMG
- Hankonen, N., Kinnunen, M., Absetz, P., & Jallinoja, P. (2014). Why do people high in self-control eat more healthily? Social cognitions as mediators. *Annals of Behavioral Medicine*, 47(2), 242-248. https://doi.org/10.1007/s12160-013-9535-1
- Hayes, A. F. (2016). Model templates for PROCESS for SPSS and SAS. Retrieved May 1, 2025, from https://osf.io/29c8p/download
- Hoyt, A. L., Rhodes, R. E., Hausenblas, H. A., & Giacobbi, P. R., Jr. (2009). Integrating five-factor model facet-level traits with the theory of planned behavior and exercise. *Psychology of Sport & Exercise*, 10(5), 565-572. https://doi.org/10.1016/j.psychsport.2009.02.008
- Jones, A. B., Brown, N. A., Serfass, D. G., & Sherman, R. A. (2017). Personality and density distributions of behavior, emotions, and situations. *Journal of Research in Personality*, 69, 225-236. https://doi.org/https://doi.org/10.1016/j.jrp.2016.10.006
- Kanfer, F. H. (1970). Self-regulation: Research, issues and speculations. In C. Neuringer & L. Michael (Eds.), *Behavior Modification in Clinical Psychology* (pp. 178-220). Appleton-Century-Crofts.
- Liu, C., Wang, D., Liu, C., Jiang, J., Wang, X., Chen, H., Ju, X., & Zhang, X. (2020). What is the meaning of health literacy? A systematic review and qualitative synthesis. *Family Medicine and Community Health*, 8(2), e000351. https://doi.org/10.1136/fmch-2020-000351
- McAnally, K., & Hagger, M. S. (2023). Health literacy, social cognition constructs, and health behaviors and outcomes: A meta-analysis. *Health Psychology*, 42(4), 213-234.

 https://doi.org/10.1037/hea0001266

- McEachan, R. R. C., Conner, M. T., Taylor, N., & Lawton, R. J. (2011). Prospective prediction of health-related behaviors with the theory of planned behavior: A meta-analysis. *Health Psychology Review*, 5(2), 97-144. https://doi.org/10.1080/17437199.2010.521684
- McMillan, B., & Conner, M. (2007). Health cognition assessment. In S. Ayers, A. Baum, C. McManus, S. Newman, K. Wallston, J. Weinman & R. West (Eds.), *Cambridge handbook of psychology, health and medicine* (2nd ed., pp. 260-266). Cambridge University Press.
 https://doi.org/10.1017/CBO9780511543579.057
- Milne, S., Sheeran, P., & Orbell, S. (2000). Prediction and intervention in health-related behavior: A meta-analytic review of protection motivation theory. *Journal of Applied Social Psychology*, 30, 106-143. https://doi.org/10.1111/j.1559-1816.2000.tb02308.x
- Phillips, P., Abraham, C., & Bond, R. (2003). Personality, cognition, and university students' examination performance. *European Journal of Personality*, *17*, 435-448. https://doi.org/10.1002/per.488
- Poppe, L., Steen, J., Loh, W. W., Crombez, G., De Block, F., Jacobs, N., Tennant, P. W. G., Cauwenberg, J. V., & Paepe, A. L. D. (2024). How to develop causal directed acyclic graphs for observational health research: A scoping review. *Health Psychology Review*. https://doi.org/10.1080/17437199.2024.2402809
- Roberts, B. W., & Yoon, H. J. (2022). Personality psychology. *Annual Review of Psychology*, 73, 489-516. https://doi.org/10.1146/annurev-psych-020821-114927
- Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change. *Journal of Psychology*, 91(1), 93-114. https://doi.org/10.1080/00223980.1975.9915803
- Rohrer, J. M., Hünermund, P., Arslan, R. C., & Elson, M. (2022). That's a lot to process! Pitfalls of popular path models. *Advances in Methods and Practices in Psychological Science*, *5*(2), 1-14. https://doi.org/10.1177/25152459221095827
- Rosenstock, I. M. (1974). Historical origins of the health belief model. *Health Education & Behavior*, 2(4), 328-335. https://doi.org/10.1177/109019817400200403

- Schneider, D. J. (1991). Social cognition. *Annual Review of Psychology*, *42*(1), 527-561. https://doi.org/10.1146/annurev.ps.42.020191.002523
- Schüz, B. (2017). Socio-economic status and theories of health behaviour: Time to upgrade a control variable. *British Journal of Health Psychology*, 22(1), 1-7. https://doi.org/10.1111/bjhp.12205
- Sheeran, P., Gollwitzer, P. M., & Bargh, J. A. (2013). Nonconscious processes and health. *Health Psychology*, 32(5), 460-473. https://doi.org/10.1037/a0029203
- Sheeran, P., Klein, W. M. P., & Rothman, A. J. (2017). Health behavior change: Moving from observation to intervention. *Annual Review of Psychology*, 68(1), 573-600 https://doi.org/10.1146/annurev-psych-010416-044007
- Sheeran, P., Maki, A., Montanaro, E., Avishai-Yitshak, A., Bryan, A., Klein, W. M. P., Miles, E., & Rothman, A. J. (2016). The impact of changing attitudes, norms, and self-efficacy on health-related intentions and behavior: A meta-analysis. *Health Psychology*, *35*(11), 1178-1188. https://doi.org/10.1037/hea0000387
- Sherman, S. J., Judd, C. M., & Park, B. (1989). Social cognition. *Annual Review of Psychology*, 40(1), 281-326. https://doi.org/10.1146/annurev.ps.40.020189.001433
- Steinmetz, H., Knappstein, M., Ajzen, I., Schmidt, P., & Kabst, R. (2016). How effective are behavior change interventions based on the Theory of Planned Behavior? A three-level meta-analysis.

 Zeitschrift Fur Psychologie-Journal of Psychology, 224(3), 216-233. https://doi.org/10.1027/2151-2604/a000255
- Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behavior. *Personality* and Social Psychology Review, 8, 220-247. https://doi.org/10.1207/s15327957pspr0803_1
- Strickhouser, J. E., Zell, E., & Krizan, Z. (2017). Does personality predict health and well-being? A metasynthesis. *Health Psychology*, *36*(8), 797-810. https://doi.org/10.1037/hea0000475
- Trafimow, D., & Duran, A. (1998). Some tests of the distinction between attitude and perceived behavioural control. *British Journal of Social Psychology, 37*(1), 1-14. https://doi.org/10.1111/j.2044-8309.1998.tb01154.x

- Trafimow, D., & Fishbein, M. (1995). Do people really distinguish between behavioural and normative beliefs? *British Journal of Social Psychology, 34*(3), 257-266. https://doi.org/10.1111/j.2044-8309.1995.tb01062.x
- Trafimow, D., & Sheeran, P. (1998). Some tests of the distinction between cognitive and affective beliefs. *Journal of Experimental Social Psychology*, *34*(4), 378-397. https://doi.org/10.1006/jesp.1998.1356
- Triandis, H. C. (1977). Interpersonal behavior. Brookes/Cole.
- van Rooij, I., & Baggio, G. (2021). Theory before the test: How to build high-verisimilitude explanatory theories in psychological science. *Perspectives on Psychological Science*, *16*(4), 682-697. https://doi.org/10.1177/1745691620970604
- Wollast, R., Phillips, J. B., Hagger, M. S., Hamilton, K., Ann, D., & Luminet, O. (2025). Theory of planned behavior constructs as mediators of relations between personality traits, trust, and COVID-19 preventive behavior adherence. *Social Science & Medicine*, 384, 118531.
 https://doi.org/10.1016/j.socscimed.2025.118531

Figure 1
The Trait-Informed Attitude, Cognition, and Intention Tenet (TACIT).

