Original Article

Towards a Psychology of Policy Support: How Individual-Level Research Could Contribute to System-Level Change

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Health behaviour change interventions predominantly target individuals and endeavor to increase their motivation, capability, and opportunity for behaviours like smoking cessation, healthy eating, and regular exercise (see, e.g., Hagger et al., 2020, for a review). There is growing concern, however, that individual-level interventions are modestly effective at best (e.g., Albarracín et al., 2024; Maier et al., 2022). Chater and Loewenstein (2023) argued that researchers and policy makers should focus on system-level change rather than individual-level behavioural programs. Their argument was not only that individual-level interventions are largely ineffective, but also that focusing on individuals diverts attention from the key drivers of behaviour – systemic factors.

Chater and Loewenstein's (2023) paper is provocative and there is much with which to disagree – but also much that engenders agreement. The paper is important in stimulating discussion about systemic drivers of behaviour and the effectiveness of individual-level (*i-level*) and system-level (*s-level*) interventions for promoting behaviour change. However, the paper presents a dilemma for researchers trained in individual-level survey and experimental methods. On the one hand, the case for *s*-level interventions such as legislation (e.g., restriction, regulation) and fiscal measures (e.g., taxes, subsidies) seems compelling or, at the very least, worth pursuing. On the other hand, how can researchers working at the *i*-level contribute to *s*-level change?

The Public's Role in Policy Change

i- and *s*-level change are not opposites. In our research, support for tobacco control policies at the individual level (e.g., education, persuasion), system-level (e.g., legislation, taxation), and nudges (e.g., visibility of tobacco products) were positively correlated ($.13 \leq r \leq .46$, ps $< .05$; Avishai & Sheeran, unpublished data), which suggests that participants may be more concerned with the extent of behaviour change than whether interventions are *i*-level or *s*-level. Chater and Loewenstein (2023) acknowledged that there is continuity between *i*- and *s*-level change, pointing out that, "[r]adical systemic change often comes from the bottom-up … Understanding which policies gather popular support … and how to design policies to maximize that support are key challenges" (p. 82). Thus, i-level research could contribute to *s*-level change by understanding and mobilizing public support for relevant legislative and fiscal policies.

But does public support for health policies matter? Do changes in public support change policies? Caughey and Warshaw (2022) pointed out that Americans can change policies in two ways. The first is to change politicians by supporting candidates and parties committed to enacting their preferred policies. The second is to mobilize public support for those policies. Caughey and Warshaw argue that these routes to policy change are

independent; policies can change even without removing incumbents. Policies are responsive – they reflect public opinion – though "responsiveness can be painfully slow and halting" (p. 8). In empirical tests, they observed that "… states are highly responsive to issue-specific opinion … the average policy in our data set matches opinion majorities about 60 per cent of the time, with proximity improving the longer policy has been on the political agenda" (p. 8). The implication is that health psychology could play a useful role in promoting policy change through research geared at forging opinion majorities on salutary health policies.

The Operating Conditions Framework and Mobilizing Public Support for Health Policies

Psychological research on support for health policies is likely to benefit from the programmatic approach offered by the Operating Conditions Framework (OCF; Rothman & Sheeran, 2021). The OCF extends the Experimental Medicine Approach (e.g., Sheeran et al., 2017) to integrate mechanisms and moderators in interventions to change cognitive, affective or behavioural responses. The OCF suggests the following agenda for research on policy support:

1. Identify policies that modeling or other evidence suggests could alter the incidence of the focal behaviour at the population level.

2. Discover the distribution of public support for respective policies to determine candidate policies that exhibit scope for opinion change.

3. Identify mechanisms of action or targets that relate to policy support and garner evidence about targets (*target validation*) and sample and other features that qualify target validity (*validity moderation*).

4. Determine the optimal intervention strategies for modifying respective targets (*target engagement*) and sample and other features that qualify target engagement (*engagement moderation*).

5. Undertake full tests that trace the impact of interventions through targets to policy support and assess both validity and engagement moderation.

The implementation of these steps is illustrated below using US data from a new survey conducted via Qualtrics (N = 752, M*age* = 44.38, SD*age* = 17.95; 58.5% women, 22.2% minoritized) and recent studies on policies to end combustible cigarette use (Avishai et al., 2023). Considerable research attests to the potential efficacy of these policies (e.g., MacDaniel et al., 2016).

Support for Legislative Policies

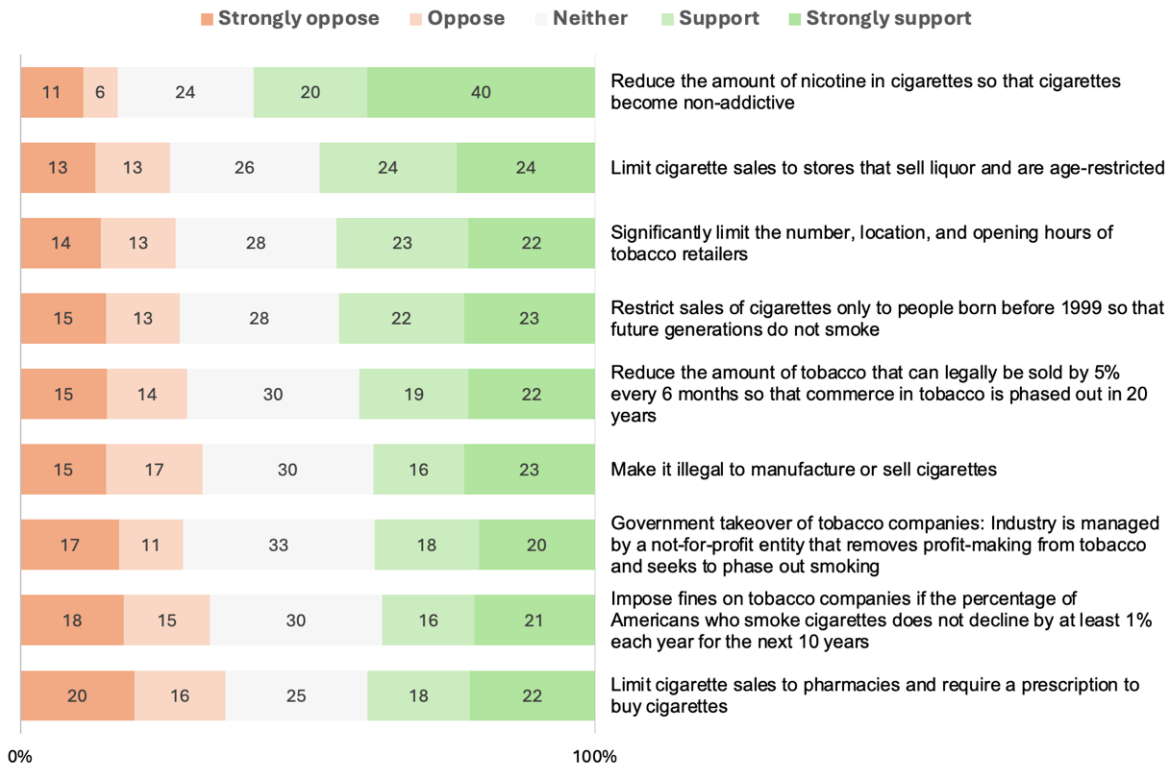
Figure 1 outlines 9 policies and the levels of public support observed for each case (Steps 1 and 2). The policies are legislative, involving legal measures focused on the product (e.g., reduce nicotine levels in cigarettes), users (e.g., require a prescription), industry (e.g., government takeover), and market supply (e.g., sales ban). Fiscal policies (taxes on cigarettes and the tobacco industry) were also examined but findings were virtually identical and are not discussed further.

The distributions of policy support indicate considerable scope for change in each case.

An opinion majority was observed for only one policy (nicotine reduction) and rates of opposition ranged from only 17% to 36%. Importantly, one-quarter to one-third of the sample neither opposed nor supported each policy.

Putative targets were identified from relevant literature (e.g., Grelle & Hofmann, 2024; Proudfoot & Kay, 2014), namely, perceptions of the policies (helpful vs. manipulative; gradual vs. radical change), issue engagement (considered vs. reactive), priority of the public health goal of 5% smoking prevalence by 2030, beliefs about the

Figure 1. Public Support for Legislative Policies to End Combustible Cigarette Use



prevalence and seriousness of the harms of smoking, and the perceived difficulty of behavior change. To validate these targets (Step 3), we combined the 9 policies into single scale that proved unifactorial and highly reliable (α = .93) and regressed the scale on putative targets. Validity moderation was considered by undertaking separate regressions for participants who smoked or did not (n = 246 and 506, respectively). Table 1 shows that, for both groups, the priority of the public health goal, estimated prevalence of harm, and policy helpfulness positively predicted support. Interestingly, for non-smoking participants the extent to which the policies represented gradual rather radical change was associated with greater support, whereas greater policy consideration was related to higher support for participants who smoked. Neither harm severity nor behavioural difficulty related to support. The implication of these analyses is that interventions that effectively engage these targets are liable to generate change in public support for a suite of legislative tobacco control policies.

Support for Prohibition of Cigarette Sales

Avishai et al. (2023) undertook the same steps in relation to one tobacco endgame policy – banning the sale and purchase of cigarettes (Step 1). Study 1 showed that the perceived effectiveness of the ban and reactance to prohibition (disdaining curtailment of consumer choice) were key predictors of policy support (Step 2). Because most non-smokers supported a ban (61%) but only a minority of participants who smoked cigarettes were supportive (36%), subsequent studies focused on cigarette consumers. Avishai et al. (2023) combined Steps 4 and 5 and tested interventions to

Table 1. Multiple Regressions of Support for Legislative Policies on Putative Targets for Participants Who Smoke and Do Not Smoke Cigarettes

Putative target	Do not smoke	Smoke
	β	*β*
Policy opinions are considered (vs. initial reaction)	.03	.14*
Policy helps (vs. manipulates) people	.18***	.11*
Policy represents gradual improvement (vs. radical change)	.18***	-.07
Priority of public health goal of 5% smoking rate by 2030	.42***	.51***
Harm prevalence (% of consumers who die from smoking)	.13***	.11*
Harm severity (years of life lost from smoking)	.01	.06
Perceived difficulty in quitting cigarettes	.00	.03
Model *F*	29.42***	20.65***
Adjusted R^2	.37	.36

engage the specified targets and their impact on policy support. Effectively engaging the targets proved challenging. Narrative persuasion (Study 2) and paradoxical thinking (Study 3) interventions had no effect on the targets or outcome. In Study 4, a self-persuasion intervention that highlighted the tobacco industry's role in engineering addiction proved effective in engaging both reactance and perceived effectiveness, and increased support for banning the sale and purchase of cigarettes. Avishai et al. (2023) also observed that issue framing ("a ban on cigarettes" vs. "protecting Americans from avoidable harm") altered support for a ban.

Implications and Future Directions

These studies suggest that the OCF could offer a systematic approach to understanding and mobilizing public support for policies that promote health. As with any new program of research, the studies have limitations (e.g., sample representativeness, length of follow-up, tests of engagement moderation) and additional work is needed to corroborate and refine this research.

The OCF is a meta-theory that is designed to enhance the programmatic development of empirical and conceptual research. A pressing challenge is to advance a substantive theory of policy attitudes that could help researchers identify targets and potential intervention strategies. Although policy effectiveness is an important determinant of public support that has attracted research attention (e.g., Reynolds et al., 2020), the role of other policy features (e.g., reach, affordability, intrusiveness) also warrants consideration. Work with Julian Rucker and Deshira Wallace on reparations for enslavement as a policy to promote health equity suggests that public support rests on perceptions of three factors: the problem (i.e., beliefs about the scope and causes of the health issue), the policy (e.g., perceived effectiveness and fairness), and the people (i.e., cognitions and emotions concerning groups affected by the policy). The Problem-Policy-People or P3 Model may offer a useful step towards theory development and warrant empirical testing.

At present, most behavioural health research addresses the *i*-level. This is likely because training in health psychology and related disciplines focuses on this level, and researchers believe that *i*-level interventions are efficacious, or efficacy can be improved. Debating the value of *s*-level versus *i*-level interventions in mutually exclusive terms is liable to prove fruitless (Sniehotta et al., 2017). Both intervention levels are means to the larger

goal of health behavior change, and identifying synergies between *i*- and *s*-level approaches stands to be more productive. The present research discussed one such synergy – capitalizing on the expertise of i-level researchers to understand and mobilize public support for health policies and thereby promote *s*-level change. There is considerable scope for theoretical development and empirical work on public support for manifold health policies (e.g., universal basic income, carbon taxes). The Operating Conditions Framework offers a useful vantage point for marshalling studies on policy support and could prove useful for researchers who wish to study policy acceptance and so contribute to system-level change.

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