

Beyond the Clinic: A Review of PERMA-Based Interventions in Non-Healthcare Populations

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ABSTRACT

Much of the early intervention work built on Seligman's PERMA model (Positive Emotion, Engagement, Relationships, Meaning and Accomplishment) grew out of healthcare settings, where it was used with clinical groups such as cancer patients and people managing chronic illness. The model has much more implications than simply being applicable to clinical contexts. This paper reviews how PERMA-based interventions have been adapted for populations outside the clinic, organising the literature around five settings: schools and universities, workplaces, military personnel and veterans, sport, and older adults living in the community. The evidence clearly shows a significant gap in executing standardized PERMA protocols in interventions across various settings. Schools and aging populations have produced the most genuinely experimental work, including randomised and quasi-experimental designs, whereas much of what is described as a PERMA intervention in workplace and military contexts turns out to be correlational or psychometric rather than a tested programme. Across all five settings the model is repeatedly extended (PERMA+4, PERMA-H), which speaks to its flexibility but also to a degree of conceptual under-specification. Measurement is inconsistent and many studies enlist PERMA-Profiler as a holistic measure of wellbeing and doesn't consider further useful domain-level variation. Furthermore, the PERMA framework has been solely modeled on a Western population and fitting the model without cultural attunement raises questions on intervention protocol. The review draws on freely accessible databases; funding constraints meant that several major subscription databases could not be searched, which is acknowledged as a limitation. Taken together, the literature supports PERMA's usefulness beyond the clinic while pointing clearly to the need for stronger designs, standardised measurement, and culturally grounded adaptation.

Keywords: *PERMA, Positive Psychology Intervention, Flourishing, Well-Being, Non-Clinical Populations*

Historical accounts of psychology continuing to the 20th century had a singular emphasis on relieving human suffering by gaining insights on the human psyche, behaviour and cognition and how they play a vital role in the development of significant psychopathology. Seligman and Csikszentmihalyi (2000) argued that this preoccupation with deficit and disorder had left the discipline with little to say about the

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conditions under which people actually do well. The PERMA model, laid out by Seligman (2011) in *Flourish*, was an attempt to give that positive question a usable structure, expanding the earlier three-part account of authentic happiness he had set out a decade before (Seligman, 2002). It proposes five elements of well-being that can each be pursued for their own sake and measured on their own terms: positive emotion, engagement, relationships, meaning, and accomplishment.

Each element rests on an established line of work. Positive emotion connects to Fredrickson's (2001) broaden-and-build theory, which holds that pleasant affective states widen attention and help people accumulate lasting psychological resources. Engagement draws on Csikszentmihalyi's (1990) account of flow, the absorbed state in which a person loses track of time while stretched by a challenge they can meet. Relationships reflect the long-standing finding that social connection is among the strongest correlates of health and longevity. Meaning stems from older eudaimonic traditions concerned with belonging to and serving something beyond the self, and accomplishment captures the pursuit of mastery and achievement that people value even when it brings no obvious pleasure. Butler and Kern (2016) turned this structure into the PERMA-Profiler, a 23-item self-report measure that has since been validated across a range of cultures and populations.

From Clinical Origins to Everyday Settings

The first wave of applied PERMA research has been mostly utilized in healthcare settings. The model has been used to demonstrate well-being in people living with chronic illness, mental disorders, and cancer, where the language of flourishing offered an alternative to a purely symptom-focused account of recovery. Although the model is widely applicable to clinical settings, Seligman (2011) presented PERMA as a general theory of what makes life go well which could also extend to a well-being framework applicable to schools, organisations, and communities. If the framework is sound, its reach into ordinary, non-clinical life is not a side application but a direct test of its premises.

That test has been running for over a decade, scattered across education, organisational psychology, military rehabilitation, sport, and gerontology. What has been missing is a synthesis literatures against one another rather than in isolation.

Rationale

This review focuses on bringing forth the non-healthcare PERMA literature into a single frame and asks a deliberately practical question: outside the clinic, where has the model actually been turned into an intervention and tested, and where has it instead been used more loosely as a vocabulary for talking about well-being? This distinction serves as an important one as it facilitates the decision-making of the practitioner or researcher deciding whether to invest in a PERMA-based programme for students, employees, service personnel, athletes, or older adults. The review groups the literature by population, evaluates the design and findings of the work in each, and then draws the threads together to consider what the model offers beyond its original settings.

METHOD OF THE REVIEW

This is a narrative literature review rather than a systematic one, and it does not claim the exhaustive, fully reproducible coverage that a systematic protocol would demand. The search was nonetheless guided by the logic of the PRISMA framework at the identification and screening stages. Studies were identified through four freely accessible databases: PubMed, Semantic Scholar, Google Scholar, and ResearchGate. Search terms combined the

core construct (PERMA, positive psychology intervention, flourishing, well-being) with population descriptors such as school, university, workplace, employees, veterans, military, athletes, sport, and older adults. Records were first screened by title and abstract for relevance to PERMA-based work in non-clinical groups. Full texts of the remaining records were then read and retained where they reported an intervention design, a programme evaluation, or theoretical and psychometric work bearing directly on how PERMA is applied in these settings. Reference lists of retained papers were hand-searched to recover further sources.

One constraint should be stated plainly rather than buried. Funding limitations prevented access to several major subscription databases, including Scopus, Web of Science, APA PsycINFO (EBSCO), and ProQuest. This review therefore rests on what was openly available, and the possibility that relevant studies were missed is a real limitation.

REVIEW OF RELATED LITERATURE

PERMA in Educational Settings

Education is where PERMA has been applied most seriously and tested most rigorously, largely under the banner of positive education. The whole-school model is the dominant form. Norrish's (2015) account of Geelong Grammar School set the template, embedding the framework into the institution through an ethos of learning, living, teaching, and embedding well-being rather than bolting it on as a separate class. Shoshani et al. (2016) gave this approach some of its firmest experimental support through the Maytiv programme in Israel, reporting gains in early adolescents' well-being, engagement, and academic outcomes.

Cross-cultural validation has been a recurring concern, and it is here that the Hong Kong studies are useful. Lai et al. (2018) confirmed a multidimensional PERMA-H model in primary school children as young as eight, with the well-being dimensions correlating positively with happiness and physical health and negatively with anxiety and depression. Importantly, they found that children's use of their character strengths mediated the link between knowing those strengths and actually flourishing, which implies that PERMA programmes work better when they help students apply strengths rather than merely identify them. Au and Kennedy (2018) extended this to a Hong Kong secondary school, evaluating the PERMA-based Flourishing Life programme with a survey of 495 students and two focus groups. Their finding that older students (Grades 8 and 9) benefited more than younger ones (Grade 7) is a small but telling result: it suggests the model's developmental appropriateness is not uniform, and that programme effects cannot be assumed to transfer cleanly down the age range.

Two recent studies show the model being adapted to the practical realities of school systems rather than ideal conditions. Wammerl and Lichtinger (2025) evaluated PERMA. Teach, the largest positive education initiative in the German-speaking world, with a controlled design involving 155 teachers and 1,402 students across five Austrian states. Teachers in the intervention group reported significantly higher life satisfaction and more positive emotion than controls, and rated the programme highly, though the student-level effects were more muted than the enthusiasm of the implementation might suggest. Lu et al. (2025) took a different route in Chinese vocational schools, where dedicated counsellors are scarce; in one Sichuan survey only about 77% of such schools had a full-time counsellor. Rather than require psychological expertise, they folded PERMA into an ordinary problem-based learning model for a mechanical drawing course. In a crossover design with 207 students, the PERMA-based teaching outperformed conventional instruction across all measured

dimensions of positive psychological functioning and on learning interest and motivation. The contribution is less about effect size than about delivery: it shows PERMA can be embedded in subject teaching by non-specialists.

Higher education has been slower to build and implement PERMA programmes, despite well-documented distress among students. Morgan and Simmons (2021) addressed this gap directly with an eight-session online programme delivered by a counsellor to university students in the United Kingdom, arguing that the relative anonymity of online delivery lowered the threshold for students who would avoid face-to-face support. Teachers themselves are an easily overlooked population within education. Uzun and Özdemir (2025) piloted a seven-week PERMA programme with 24 special education teachers in Türkiye, a group exposed to high emotional and occupational demands, and reported preliminary improvements in well-being. As a pilot with a small sample it cannot carry much inferential weight, but it usefully reframes teachers as recipients of well-being interventions rather than only as their delivery mechanism.

PERMA in Workplace and Organizational Settings

Kern et al. (2015) established that PERMA scores track positively with physical health, life satisfaction, job satisfaction, and organisational commitment, and Donaldson et al. (2022) built on this with the PERMA+4 framework, adding physical health, growth mindset, work environment, and economic security as workplace-specific building blocks. The addition of economic security is a genuinely useful domain, since financial difficulties could facilitate disengagement that the original five elements simply did not capture.

The difficulty is evidential rather than conceptual. Much of the organisational work demonstrates that PERMA correlates with desirable outcomes, or proposes how interventions might be mapped onto each element, rather than testing a defined programme against a control condition. The frequent move to extend the model, from PERMA to PERMA+4, is double-edged: it improves contextual fit, but a framework that grows a new component whenever it meets a setting it does not quite explain is also showing the limits of its original specification. There is a further practical wrinkle around measurement. Individual-level instruments such as the PERMA-Profiler do not straightforwardly aggregate to teams or organisations, which is the level at which workplace interventions actually operate, and the development of short and group-oriented measures has been a response to this mismatch. For now, the organisational case for PERMA is best read as promising and well-theorised rather than as established through intervention trials.

PERMA Among Military Personnel and Veterans

Military personnel and veterans are an appealing target for a strengths-based model, because stigma and confidentiality concerns keep many of them away from conventional, deficit-framed services. Yet this is also the setting where the gap between the language of intervention and the reality of the evidence is widest. The substantial body of work led by Umucu is largely correlational and psychometric. Umucu et al. (2020) validated the PERMA-Profiler in student veterans; Umucu (2021) confirmed its factor structure in 156 veterans with mental illnesses, finding a second-order model fit best; and Umucu et al. (2022) showed in 205 student veterans that PERMA mediated the relationship between service-connected disability and college adjustment. A companion canonical-correlation study of the same population reported that positive traits and PERMA shared substantial variance, and, more pointedly, that veterans with service-related disabilities scored

significantly lower on resilience, secure attachment, and PERMA than their non-disabled peers (Umucu et al., 2021).

This work is valuable, but it establishes that PERMA describes veteran well-being, not that PERMA-based programmes improve it. The clearest actual intervention in this space, the GUIDE mobile-health trial by Dunphy and Nuske (2025), is instructive precisely because it is honest about a disappointing result. In a waitlist-controlled trial with 115 first responders, military personnel, and veterans, using PERMA as an outcome, the app proved feasible and acceptable, but it did not produce significant improvement over the control condition, and financial incentives raised engagement with peer-support features without translating into better outcomes. Read alongside the correlational literature, the message is sobering: we have good evidence that PERMA matters for this population and weak evidence that we yet know how to move it.

PERMA in Sport and Physical Activity

Sport is an obvious home for PERMA, since training environments generate flow, teammate relationships, and mastery almost as a by-product, yet explicit PERMA interventions remain thin and the field leans on description. Glibo's (2024) qualitative work with adolescents is a fair representation of the current state: thematic analysis mapped young people's accounts of sport onto all five PERMA elements, with fun and pride loading onto positive emotion and coach and peer bonds onto relationships, but this maps the model onto experience rather than testing a programme.

The intervention evidence that does exist is mostly adjacent to PERMA rather than built on it. Wang et al.'s (2025) meta-analysis of well-being interventions in elite athletes found that psychological skills training, third-wave approaches, and positive psychology interventions were all potentially effective, with standardised mean differences of 0.78, 0.32, and 0.58 respectively. The wide spread of these estimates, and the authors' observation that many studies blurred performance goals with well-being goals, points to a real problem: without a coherent organising framework, sport interventions struggle to say which mechanism is doing the work. A PERMA structure could in principle supply that coherence. The strongest single trial, Ronkainen et al.'s (2025) randomised study of a six-week acceptance and commitment therapy group with 95 national-level athletes, reported improved well-being and a large reduction in stress. Although ACT is not PERMA, but its emphasis on engagement and values-based action overlaps enough that it indicates the kind of well-specified, theory-driven trial that PERMA work in sport has so far mostly lacked.

PERMA among Older Adults

Aging research offers some of the better-designed PERMA intervention work outside schools, perhaps because gerontology already had a strong tradition of structured psychosocial programmes to build on. The results, though, are usefully mixed rather than uniformly positive. Bartholomaeus et al. (2019) ran an eight-week community well-being and resilience programme delivered by community partners across two studies. Among general-population older adults, the only significant effect was reduced social isolation, with no movement on well-being, optimism, or resilience; among older carers, a higher-risk group, the programme improved every outcome except social isolation. That pattern is more informative than a clean positive result would have been, because it suggests these programmes may do most where baseline need is greatest.

Allen (2017) combined PERMA with physical activity in a quasi-experimental study of 45 adults over 50, pairing a six-week yoga class with PERMA-structured journaling and finding gains on the Flourishing Scale and a salutogenic wellness measure relative to controls. The integration of movement with reflective practice is a sensible adaptation to older adults' preferences, though the small sample limits what can be concluded. Looking forward, Klier and Lugin (2025) proposed using PERMA, alongside self-determination theory, as a design and evaluation framework for socially assistive robots in elder care, arguing that such systems might support positive emotion, engagement, and a sense of relationship. This is conceptual rather than tested, and it should be read as a research agenda rather than evidence, but it shows the model being recruited to frame emerging technologies for an aging population.

DISCUSSION

Reading these five literatures together brings out a pattern that none of them shows on its own: the label PERMA intervention covers a wide range of evidential commitments. At one end sit the school and aging studies, with randomised, controlled, and quasi-experimental designs and named programmes. At the other sit much of the organisational and military work, where PERMA functions as a measurement framework or an organising vocabulary, and the word intervention is doing more work than the designs can support. Anyone deciding whether to adopt a PERMA programme should locate a given study on that spectrum before drawing on it, because the school evidence and the workplace evidence are not the same kind of evidence at all.

A second pattern is the model's habit of growing. PERMA becomes PERMA-H in schools and PERMA+4 in workplaces, and each extension is locally reasonable. But the recurrence of this move across settings suggests the original five elements under-determine well-being in specific contexts, and that the framework's celebrated flexibility is partly a symptom of that under-specification. This is not fatal. A flexible scaffold that practitioners can adapt has obvious practical value, and the accessibility of the acronym genuinely helps non-specialists deliver programmes, as the Austrian teacher-training and Chinese vocational studies both show. It does, however, complicate any claim that PERMA is a single, well-defined intervention whose effects can be compared across fields.

Measurement is the third recurring problem. The reliance on the PERMA-Profiler is a strength for comparability, but its additive scoring collapses five distinct domains into a single flourishing figure, and a composite score can easily hide the very domain-level information a practitioner would want, for instance a person who is high on accomplishment but isolated on relationships; this is precisely the case earlier scholars made for keeping well-being measurement multidimensional rather than reducing it to a single index (Forgeard et al., 2011). The organisational literature's struggle to measure PERMA at the team level compounds this. Until measurement practice routinely retains the multidimensional profile while also reporting a comparable aggregate, cross-study synthesis will remain harder than it should be.

Finally, the cultural question runs underneath all of this. PERMA was developed in Western, largely Anglophone settings, and although the Hong Kong, Austrian, Turkish, and Chinese studies reviewed here show it travelling, the model's emphasis on individual accomplishment and its lighter treatment of collective and relational obligation may fit uneasily in more collectivist contexts. The studies that adapted the model to local conditions, rather than importing it wholesale, tended to be the ones that reported the cleaner results,

which is itself a hint that cultural adaptation is not optional. For research conducted in and for the Global South, including India, this is not a peripheral caveat but a central design consideration.

Two limitations of the present review bear directly on these conclusions. First, as noted in the method, funding constraints restricted the search to freely accessible databases, so relevant subscription-indexed studies may be absent and the picture drawn here is necessarily partial. Second, the positive psychology field has a known tilt toward publishing positive findings, and the openly available literature may over-represent successful programmes; the candour of the Dunphy and Nuske (2025) null result and the partial nulls in Bartholomaeus et al. (2019) is a healthy reminder that not every PERMA programme works.

CONCLUSION

Outside the clinic, PERMA has proven genuinely portable. It has been built into school curricula and teacher training, mapped onto workplace well-being, used to frame veteran adjustment, applied to athletes, and adapted for older adults in community settings. Where the model has been turned into a defined programme and tested with a control condition, most clearly in schools and with older adults, the results are encouraging if modest. Where it has been used more loosely, especially in organisational and military research, the enthusiasm currently outruns the intervention evidence.

The honest summary is that PERMA is a useful and adaptable framework for promoting flourishing beyond healthcare, but the field is still in an early, proof-of-concept phase for many populations. The priorities now are not further demonstrations that PERMA correlates with good outcomes, but well-designed trials that test specified programmes, measurement that preserves the model's multidimensional detail, and adaptation that takes culture seriously rather than treating it as an afterthought. If the next decade of work attends to those three things, the model's promise for non-clinical populations can be tested properly rather than merely asserted.

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