

Proposition 4: Healthy Development Builds Resilience

Healthy Development Builds Resilience: Matching Adolescents with Rescue Animals as a Pathway to Protective Processes

Abstract

Resilience is not a fixed personality trait possessed by some young people and lacking in others. It is a developmental capacity that grows through repeated experiences of safe relationships, competence, connection, and successful adaptation. This paper examines that proposition in the context of matching adolescents with rescue animals. Drawing on foundational work by Emmy Werner, Ann Masten, Michael Rutter, Suniya Luthar, and Andrew J. Martin, together with attachment theory, ecological systems theory, self-efficacy theory, and positive psychology, the paper argues that supportive relationships with companion animals can function as an additional protective system. Everyday responsibilities of animal care—feeding, walking, grooming, training, and comforting an anxious animal—provide mastery experiences that strengthen self-efficacy, emotional regulation, belonging, purpose, and identity. These processes do not eliminate adversity; they equip young people with internal and relational resources that enable more adaptive responses. The paper concludes that programs matching adolescents with rescue animals can deliberately cultivate the ordinary protective systems that research consistently links to resilience.

Keywords: resilience, adolescence, companion animals, ordinary magic, self-efficacy, attachment, ecological systems, identity

Resilience is not a personality trait that some young people possess and others lack. It is a developmental capacity that grows through repeated experiences of safe relationships, competence, connection, and successful adaptation. This central proposition organises the argument that follows. The paper examines how matching adolescents with rescue animals can contribute to healthy developmental processes that, in turn, build resilience. The claim is not that animals magically confer invulnerability or erase hardship. Rather, the everyday experiences of caring for a rescue animal create repeated opportunities to practise the very processes that developmental science has shown strengthen adaptive capacity. In doing so, such programs align with a growing body of evidence that resilience emerges from ordinary, everyday protective systems rather than from rare or extraordinary qualities.

What Is Resilience? Definitions, Misconceptions, and a Dynamic View

Contemporary developmental science has largely abandoned the idea of resilience as a rare or mysterious quality of “invulnerable” children. Early research on children growing up under conditions of poverty, family disruption, war, or trauma initially focused on deficit models and the prediction of pathology. What surprised investigators was the frequency with which many of these children nevertheless achieved competence in key

domains of adaptation. This observation led to a fundamental reconceptualisation of how adaptation under adversity is understood.

One of the earliest and most influential empirical foundations for this shift came from Emmy Werner's Kauai Longitudinal Study. Beginning in 1955, Werner and her colleagues followed a cohort of children born on the Hawaiian island of Kauai, many of whom faced multiple risk factors including perinatal complications, poverty, family discord, and parental mental illness (Werner & Smith, 1982, 1992, 2001). What emerged over decades of follow-up was striking: a substantial proportion of the high-risk children developed into competent, caring, and confident adults. Among the most consistent findings was the protective power of relationships. For many children exposed to significant adversity, the presence of even one stable, caring relationship—with a parent, grandparent, older sibling, teacher, or other adult—significantly altered developmental trajectories. That single reliable source of emotional support, encouragement, and consistent presence could buffer the impact of cumulative risk and open pathways toward positive adaptation.

Werner's work provided critical historical context for later resilience science. It demonstrated empirically that resilience was not the product of rare personal gifts but of ordinary human connections and resources that could be identified, protected, and strengthened. Her findings helped shift the field away from a sole focus on risk and pathology toward an examination of the protective processes that enable some children to thrive despite adversity. This emphasis on the transformative potential of even one caring relationship remains highly relevant to programs that introduce adolescents to supportive relationships with rescue animals, relationships that can themselves become sources of consistency, acceptance, and emotional security.

Building on this foundation, Masten's (2001) landmark paper framed resilience as "ordinary magic": the capacity for positive adaptation that arises from the normative operation of basic human adaptive systems rather than from extraordinary gifts or rare resources. Those systems include caring relationships with competent adults, effective problem-solving and self-regulation skills, opportunities to experience mastery and success, a positive sense of self, and supportive families, schools, and communities (Masten, 2001, 2014, 2025). When these ordinary systems are functioning reasonably well, many young people demonstrate the capacity to adapt successfully even under significant adversity. The greatest threats to development, Masten argued, are those that undermine or destroy these fundamental protective systems. The practical implication is profound: interventions need not invent extraordinary solutions; they can focus on protecting, restoring, and enhancing the ordinary systems that evolution and culture have already provided.

Rutter (1987, 2006, 2013), widely regarded as one of the founders of resilience research, emphasised that resilience is dynamic and interactive. It is inferred from better-than-expected outcomes in the presence of risk, and it develops over time through the interplay of risk and protective factors. Rutter stressed several key principles: resilience is not a fixed trait; no single protective factor is sufficient on its own; protective processes operate by reducing the impact of adversity, interrupting

negative chain reactions, promoting self-esteem and self-efficacy, and opening up new opportunities; and life-course “turning points” can redirect developmental trajectories. His work supports a systems approach in which multiple, interacting influences shape whether a young person adapts or becomes overwhelmed.

Luthar and colleagues (Luthar, 2006; Luthar & Cicchetti, 2000) defined resilience as positive adaptation *despite* significant adversity. The construct therefore requires evidence of both substantial risk exposure and better-than-expected competence or adjustment. Critically, resilience does not mean the absence of distress or the pretence that everything is fine. Young people may struggle in some domains—experiencing anxiety, sadness, or behavioural difficulties—while adapting successfully in others, such as maintaining peer relationships, school engagement, or a sense of purpose. Luthar’s work reminds us that the goal is not invulnerability but the capacity to keep adapting in the face of real hardship.

Martin’s research on academic buoyancy (Martin & Marsh, 2008, 2009; Martin, 2013) adds a valuable distinction between everyday setbacks and major adversity. Academic buoyancy refers to students’ capacity to navigate the ordinary ups and downs of school life—poor grades, exam pressure, competing deadlines, difficult schoolwork—while academic resilience concerns more severe or chronic threats that constitute major assaults on educational progress. Martin proposes a hierarchical relationship: buoyancy is a necessary but not sufficient foundation for resilience. Successfully managing everyday challenges builds the confidence, regulatory skills, and adaptive strategies that later support coping with larger difficulties. This distinction maps directly onto animal-matching programs. The daily responsibilities of animal care—remembering to feed, managing a walk in bad weather, soothing an anxious animal, attending veterinary appointments—constitute precisely the kind of manageable, repeated challenges through which buoyancy, and ultimately broader resilience, can grow.

Taken together, these perspectives converge on a developmental account. Resilience is not a static trait that some adolescents simply have and others lack. It is a capacity that emerges and strengthens through repeated experiences of connection, competence, and successful adaptation within supportive contexts. Healthy development builds the internal and relational resources that later enable young people to respond more effectively when adversity arises.

Healthy Development Creates Protective Capacities

Healthy development builds the internal resources that later support resilience. Emotional regulation, a coherent sense of identity, competence, self-esteem, and self-efficacy are not merely correlates of resilience; they are developmental products that become protective when adversity is encountered. These capacities develop gradually through everyday interactions and experiences.

Attachment theory provides a foundational pathway. Secure relationships foster confidence, which enables exploration of the environment, which in turn produces

competence, which further strengthens resilience (Bowlby, 1969/1982; Ainsworth et al., 1978). When caregivers or other attachment figures provide a secure base and a safe haven, young people are freer to engage the world, practise skills, take manageable risks, and internalise a sense of being worthy of care and capable of coping. Insecure or disorganised attachment patterns, by contrast, are associated with difficulties in emotion regulation, higher stress reactivity, and reduced capacity to use social support effectively.

Companion animals can occupy a related, though not identical, relational niche. Research indicates that many children and adolescents form attachment-like bonds with pets, turning to them for comfort under stress and experiencing physiological calming through physical contact (Beetz et al., 2012; Kerns et al., 2018). Animals offer consistent, non-verbal responsiveness and acceptance that is less contingent on performance or mood than many human relationships. For adolescents with insecure human attachments, the predictable presence of an animal may provide a particularly accessible form of co-regulation and a corrective relational experience. Studies have shown that the presence of a dog can lower cortisol responses during stressful tasks more effectively than the presence of a friendly human for some children with insecure attachment patterns (Beetz et al., 2012). Such findings suggest that animals can function as supplementary attachment figures that support the development of regulatory capacities. Werner's demonstration that even one stable, caring relationship can shift trajectories finds a contemporary parallel in the potential of a consistent, supportive bond with a rescue animal.

Bandura's (1977, 1997) self-efficacy theory supplies a complementary and powerful mechanism. Self-efficacy refers to an individual's belief in their capacity to organise and execute the actions required to manage prospective situations. The strongest source of self-efficacy is mastery experience—direct, personal evidence that one can successfully perform valued tasks, especially when those tasks require sustained effort and the overcoming of obstacles. Vicarious experience (observing others succeed), verbal persuasion, and the interpretation of physiological and emotional states also contribute, but enactive mastery is primary. A resilient sense of efficacy is built not by a series of easy successes but by experiences of overcoming difficulties through perseverant effort.

Caring for a rescue animal supplies a steady stream of such mastery experiences. The adolescent must remember and reliably complete feeding schedules, manage walks in varying weather, learn to read the animal's signals of fear, excitement, or discomfort, help the animal settle into a new home after previous adversity, accompany it to veterinary appointments, and celebrate incremental progress in training or socialisation. Each successful episode—however modest—quietly communicates “I can handle difficult situations.” Over time these experiences accumulate into a more robust belief in one's capacity to cope, a belief that can generalise beyond the animal relationship to academic, social, and personal challenges. This is precisely the pathway Martin's work on buoyancy highlights: everyday successes build the confidence that supports later resilience in the face of larger adversity.

Positive psychology, particularly Seligman's PERMA framework (Seligman, 2011), further illuminates the developmental processes involved. Rather than focusing solely on the reduction of distress or the pursuit of fleeting happiness, PERMA emphasises five elements of flourishing: positive emotion, engagement, relationships, meaning, and accomplishment. Animal care readily engages several of these elements simultaneously. The relationship with the animal itself provides positive connection; the sense of purpose derived from responsibility for another living being supplies meaning; the successful completion of daily care tasks and training goals yields accomplishment; and the focused attention required for attuned interaction fosters engagement. These experiences reinforce the strengths and relational resources that support resilience, shifting the developmental emphasis from deficit repair toward the cultivation of positive capacities.

Developing competence, belonging, self-efficacy and purpose gradually contributes to a more coherent sense of identity. Young people increasingly see themselves not simply as recipients of care, but as capable, responsible individuals able to contribute to the wellbeing of another living being. This shift in self-perception represents an important developmental achievement that itself becomes a protective factor supporting resilience. Identity coherence—knowing oneself as someone who can care, persist, and make a difference—provides an internal compass that helps adolescents navigate subsequent challenges with greater agency and hope.

Protective Relationships and Ecological Contexts Strengthen Resilience

Resilience is not created solely inside the child. Bronfenbrenner's (1979) ecological systems theory reminds us that development occurs through reciprocal interactions across nested systems—the microsystem of immediate relationships (family, peers, school), the mesosystem of connections between those settings, the exosystem of broader community and institutional influences, and the macrosystem of cultural values and policies. Protective factors at multiple levels interact. A supportive family relationship gains additional power when the school climate is also nurturing and when community resources are accessible and coordinated. Matching programs that involve families, schools, and rescue organisations therefore operate at several ecological levels simultaneously, increasing the likelihood that protective processes will be sustained and reinforced across contexts.

Masten's "short list" of protective factors—close relationships with competent, caring adults; effective caregiving; problem-solving and self-regulation skills; positive self-perceptions and self-efficacy; and supportive schools and communities—consistently emerges across decades of research and diverse cultural contexts (Masten, 2001, 2014, 2025). Supportive relationships with companion animals can be conceptualised as an additional entry on that list: another ordinary protective system that, when present and of good quality, contributes to the overall adaptive capacity of the developing person. The animal relationship does not replace human relationships; it supplements them and can, in some cases, create a bridge back to more positive human interactions by reducing isolation, providing a shared focus of care within the family, and modelling responsibility and empathy. Werner's earlier insight—that one

stable caring relationship can be transformative—is extended here into a broader ecology in which multiple ordinary protective systems reinforce one another.

Rutter's emphasis on the clustering of protective factors is relevant here. Protective influences tend to co-occur and to amplify one another. An adolescent who experiences competence through animal care may also experience enhanced belonging within the family (through shared responsibility), greater purpose, and improved emotional regulation. These effects can cascade, creating positive chain reactions that counteract the negative chain reactions often associated with cumulative adversity.

How Companion Animals Contribute to Resilience Processes: Research Themes

The contribution of companion animals can be organised around several interlocking themes supported by both theory and emerging empirical work on human–animal interaction in adolescence.

Safe relationships reduce stress. Secure attachment relationships are associated with lower physiological stress reactivity and better emotional regulation across the lifespan. Interactions with animals can produce measurable reductions in cortisol and subjective anxiety. The physical presence of a calm animal, combined with the predictable routines of care, offers co-regulation opportunities that help adolescents practise calming strategies. For young people whose human relationships have been inconsistent or stressful, the non-judgmental and consistent presence of an animal may be particularly regulating.

Emotional regulation. Young people who develop effective emotion-regulation skills cope more successfully with setbacks. Animals can reduce arousal through physical contact and presence, provide immediate non-verbal feedback, and encourage calming routines such as petting, walking, or quiet companionship. Qualitative reports from parents frequently describe pets helping adolescents regulate anger, loneliness, and distress (Charmaraman et al., 2022). The requirement to remain calm and patient while helping a fearful rescue animal settle can itself become a powerful practice ground for self-regulation.

Competence and mastery. Resilience grows when young people experience authentic success. The graded challenges of animal care—beginning with basic feeding and progressing to training, managing behavioural issues, or supporting an animal through medical procedures—create genuine mastery experiences that feed self-efficacy (Bandura, 1997). These everyday successes accumulate into confidence that one can handle difficult situations. Martin's distinction between buoyancy and resilience is useful here: the daily management of animal-related challenges builds the everyday adaptive capacity that later supports more robust resilience.

Belonging. One of the strongest and most consistent protective factors identified in resilience research is a sense of belonging and of being valued. Feeling valued by family, school, community, and—importantly—an animal creates belonging. The

animal's consistent presence, responsiveness, and apparent preference for the adolescent can convey acceptance that is less contingent than many human relationships. This sense of mattering supports identity development and buffers against isolation.

Purpose and meaning. Caring for another living being supplies responsibility, routine, and a sense that one's actions matter. Purpose consistently predicts better adaptation under stress and is a core element of flourishing in positive psychology frameworks. The commitment required by a rescue animal—especially one that has itself experienced adversity, abandonment, or trauma—can foster both meaning and hope. The adolescent is not merely a recipient of care; they become a provider of care, shifting identity toward competence and contribution.

Taken together, these processes illustrate the central scientific claim of this paper: companion animals create everyday opportunities for young people to practise the developmental processes known to strengthen resilience, including responsibility, emotional regulation, empathy, self-efficacy, supportive relationships, and the gradual formation of a more coherent and agentic identity. The matching of adolescents with rescue animals is therefore not an incidental or purely recreational activity; it can be a deliberate developmental intervention that harnesses ordinary protective systems.

Implications for Practice and the Role of Supporting Systems

Healthy development does not guarantee that adversity will disappear. It equips young people with internal and relational resources that enable more effective responses to the challenges they encounter. Programs that thoughtfully match adolescents with rescue animals, and that support those matches with guidance, training, and ongoing support for families and communities, can deliberately strengthen the protective processes described above.

Several practical considerations follow from the theoretical framework. Matching should consider the individual adolescent's capacities, interests, and current level of regulation, as well as the animal's temperament and history, so that the relationship is more likely to generate mastery rather than overwhelming failure. Families and, where relevant, schools need support to integrate the animal's care into daily routines without creating additional unmanaged stress. Rescue organisations play a critical role in providing appropriate animals, training, and ongoing advice. When these systems coordinate—family, school, community services, and animal welfare organisations—the ordinary magic of relationships, competence, and connection has greater opportunity to operate across ecological levels.

It is also important to acknowledge complexity. Not every animal relationship is beneficial. Extreme or exclusive attachment to a pet in the context of very limited human support can sometimes accompany or even intensify loneliness (Hartwig & Signal, 2020). Quality of the relationship, the presence of supportive human adults, and the developmental appropriateness of the responsibilities all matter. The goal is not

simply pet ownership but the cultivation of a supportive, mastery-oriented relationship embedded within a broader ecology of care.

Resilient systems—families, schools, rescue organisations, and communities—also help sustain healthy development. When these systems work together to protect and enhance the ordinary adaptive systems identified by Werner, Masten, and others, they create the conditions in which individual resilience is more likely to emerge and grow.

Conclusion

The proposition that healthy development builds resilience is both theoretically robust and practically actionable. Resilience is a developmental capacity cultivated through repeated experiences of safety, competence, connection, and successful adaptation. It is ordinary magic, arising from the normative functioning of basic human adaptive systems rather than from rare or mysterious qualities.

Matching adolescents with rescue animals offers a concrete, relationally rich context in which those experiences can occur. Grounded in the pioneering longitudinal work of Werner, the ordinary-magic framework of Masten, Rutter's dynamic view of protective processes, Luthar's emphasis on positive adaptation despite adversity, Martin's distinction between buoyancy and resilience, Bandura's account of mastery and self-efficacy, Bronfenbrenner's ecological systems, attachment theory, and positive psychology, the argument presented here is that such programs can contribute to the ordinary protective systems that enable young people to keep adapting, even when life is hard.

Through safe, trusting relationships with companion animals, supported by families and communities, we can strengthen the protective processes of emotional regulation, competence, belonging, purpose, self-efficacy, and identity. In strengthening those processes, we strengthen the conditions under which resilience can emerge and grow. Healthy development does not remove adversity, but it builds the capacity to meet it with greater resources, greater hope, and greater possibility of positive adaptation.

Ultimately, resilience is neither extraordinary nor accidental. It grows through ordinary experiences of connection, responsibility, competence and care. By intentionally creating opportunities for those experiences through carefully supported relationships between adolescents and rescue animals, Paws & Connect seeks to cultivate the ordinary developmental processes through which extraordinary life trajectories can emerge.

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