

Psychological Impact of Abandoned Residential Buildings: A Narrative Review Based on Beck's Cognitive Theory and Community Perception

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Abstract: *Overlooked residential buildings are growing urban issues with tremendous psychological implications on local communities. This present narrative review discusses the psychological influence of such conditions based on Beck's Cognitive Theory, in which unsightly surroundings lead to cognitive distress, which causes stress, anxiety, and depressive symptoms. The article synthesizes community perception of neglected buildings in the literature, highlighting concerns over safety hazards, lowered property values, and social deterioration. In addition to considering significant literature on urban sociology and environmental psychology, the research also includes empirical data from Klang, Selangor, with 105 residents participating in a survey questionnaire assessing their perceptions and mental health responses. Utilizing SPSS Software, findings revealed mental health and loss of pride and identity to be the most significant psychological impacts. These results confirm Beck's hypothesis that repeated exposure to neglect in the environment reinforces cognitive distortions such as helplessness and anxiety. The study emphasizes the need for targeted, psychologically informed urban interventions to revitalize deserted public spaces and restore well-being among community members. It offers valuable lessons to policymakers, city planners, and mental health professionals aiming to challenge the implicit psychological toll of urban abandonment.*

Keywords: Psychological Impact; Abandoned Buildings; Residential; Beck's Theory

1. Introduction

The presence of abandoned residential buildings has profound psychological and social implications for communities. These elements often symbolize neglect, economic decline, and social disorder, contributing to increased feelings of insecurity, stress, and diminished community well-being (Newman, 2020). From a psychological perspective, the environment is crucial in shaping individuals' cognitive and emotional responses. Beck's Cognitive Theory (Beck, 1976) suggests that negative external stimuli, such as deteriorating urban landscapes, can reinforce negative behavior thought patterns, leading to anxiety, depression, and social withdrawal. In the model of Cognitive Behavioral Therapy (CBT) were developed by Aaron Beck in 1964 structured around the idea that thoughts, emotions, and behaviors are interconnected, and that changing negative behavior thinking leads to changes in emotional state and behavior. This is often depicted using a CBT triangle or CBT model, which includes

the following core component such as Situations (External Events or Triggers). These are real-life events or environmental stimuli that a person encounters. For example: seeing an abandoned building in your neighborhood can give automatic thoughts in response to the situation eventually negative for examples "This place is unsafe.", "Nobody cares about this community." Furthermore, this influence emotions such as feels sadness, fear, hopelessness, anxiety. The cycle continues to physical response such as fatigue, restlessness. Thus, connect to the such how a person acts or behaves such as avoiding certain areas, withdrawing from neighbours, not participating in community events. Based on CBT model flow summary in Figure 1 : Cycle can become self-reinforcing into negative behaviour and emotions can feed into more negative thoughts, deepening psychological distress.

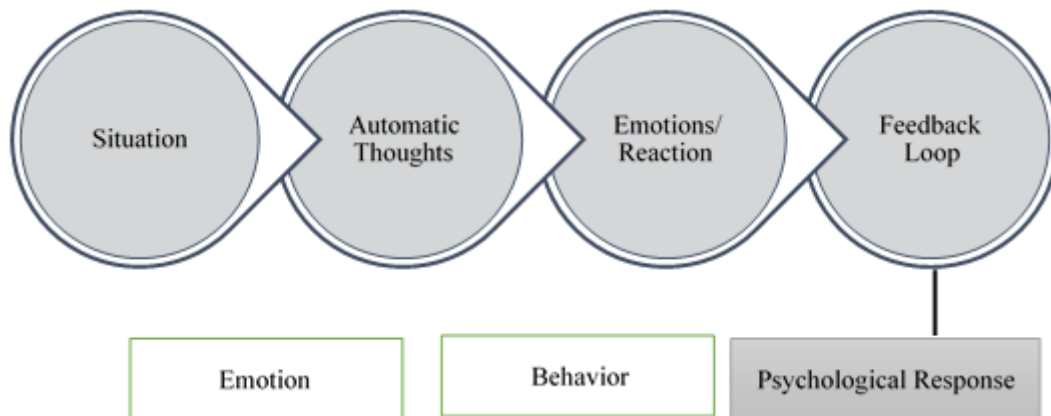


Figure 1: Cognitive Behavioral Therapy (CBT)

The cognitive behavioural model emphasizes the interconnection between thoughts, feelings, and behaviors. activation involves engaging in enjoyable and rewarding activities to improve mood and feelings. This narrative review explores the psychological impact of such elements based on Beck's Cognitive Theory, which states that negative environments shape cognitive complications, contributing to stress, anxiety, and depressive symptoms (Beck, 1976). The review synthesizes existing literature on community perception of abandoned buildings, highlighting concerns such as safety risks, decreased property values, and social decline (Newman, 2020; Smith & Brown, 2021). Studies suggest that prolonged exposure to urban decay fosters a sense of helplessness and collective distress, reinforcing negative cognitive patterns among residents (Taylor et al., 2019). Additionally, perceptions of abandonment correlate with increased crime rates and social fragmentation, further exacerbating mental health concerns (Wilson & Kelling, 1982). The significance of this abandoned buildings topic contributes to weakened social bonding, all of which worsen psychological distress among residents (Taylor et al., 2019). Additionally, the presence of abandoned elements has been associated with increased fear of crime, social alienation, and reduced trust in local governance (Wilson & Kelling, 1982).

This review contributes to urban psychology and policy discourse by bridging cognitive theory with community perception, advocating for intervention frameworks that address structural and mental health challenges. This article the three (3) key themes related to the psychological impact of abandoned residential buildings. First, it will explore community perceptions of these spaces, emphasizing the ways in which individuals interpret and internalize their presence. Second, it will analyze the cognitive and emotional consequences of exposure to urban decay, particularly in relation to Beck's Cognitive Theory. By synthesizing existing literature, this review aims to bridge the gap between psychological theory and urban studies, offering insights into the ways in which environmental neglect influences mental health. The findings of this

research underscore the need for urban revitalization strategies that mitigate psychological distress and promote community well-being. Understanding the psychological consequences of abandoned buildings can inform policymakers, urban planners, and mental health professionals in designing interventions that prioritize both community well-being and urban renewal. Future research should further investigate intervention strategies and their long-term psychological benefits, ensuring that neglected urban spaces are transformed into environments that foster resilience rather than distress.

2. Literature

The psychological impact of abandoned residential buildings is a growing concern in urban and suburban environments. Beyond their physical degradation, these structures often symbolize neglect, social decay, and insecurity within a community. This review synthesizes existing literature through the lens of Beck's Cognitive Theory, particularly his model of Cognitive Behavioral Therapy (CBT), to understand how abandoned environments influence residents' mental health and perceptions.

Beck's Cognitive Theory: Foundation of Emotional and Behavioral Distress

Aaron Beck's Cognitive Theory posits that distorted thinking often automatic, unconscious, and shaped by life experiences underlies emotional suffering and behavioral dysfunctions. In this framework, automatic thoughts and core beliefs form the basis for psychological distress, especially when individuals interpret neutral or ambiguous events through a negative cognitive filter (Beck, 1967). Beck identified that such distortions often manifest as overgeneralization, catastrophizing, personalization, and all or nothing thinking all of which can shape how individuals perceive their environments. When applied to urban decay and abandoned residential settings, Beck's theory offers a compelling explanation for how individuals cognitively interpret and emotionally respond to such surroundings. These responses can directly influence mental health, perceived powerlessness, social isolation, loss of identity, and community disconnection thematically central to this review. Theme 1 consists of five locational attributes that are closely related to the intention.

Mental Health and the Built Environment

Numerous studies have established a strong link between deteriorating neighborhood conditions and adverse mental health outcomes. According to Galea et al. (2005), individuals residing in neighborhoods with high levels of abandonment are more likely to experience depression, anxiety, and chronic stress. Beck's theory suggests that the cognitive interpretation of these decaying environments such as automatic thoughts like "my community is failing" or "no one cares about us" can trigger negative emotional responses and exacerbate mental health conditions. These thoughts often stem from deeper core beliefs such as helplessness ("I cannot change my situation") or worthlessness ("I don't matter"), reinforcing a cycle of despair. CBT principles suggest that without intervention, these beliefs become self-fulfilling and persistent.

Perceived Powerlessness and Learned Helplessness

The concept of perceived powerlessness closely aligns with Beck's identification of dysfunctional beliefs. When communities are surrounded by neglected infrastructure, especially abandoned homes, residents may internalize a sense of powerlessness in the face of systemic decline. According to Ross and Mirowsky (2001), such perceptions of helplessness are strongly correlated with depression, particularly when individuals feel incapable of initiating positive change. From a CBT perspective, these thoughts are cognitive distortions that can be challenged and restructured. However, in practice, community members without

resources or civic support often lack the tools to reframe their perceptions, thus reinforcing the distress cycle Beck describes.

Social Isolation and Community Disconnection

Social cohesion is critical for psychological well-being. Abandoned residential buildings often disrupt neighborhood dynamics, reduce social interaction, and create fear-based withdrawal from community engagement (Klinenberg, 2018). These environments serve as visual cues of decline, prompting automatic thoughts such as “I’m not safe here” or “no one wants to live here anymore,” which lead to social isolation and community disconnection. Beck’s model explains how these interpretations become ingrained, leading individuals to avoid social contact or disengage from communal life. Over time, this withdrawal exacerbates feelings of alienation and perpetuates negative thought patterns. This isolation mirrors cognitive-behavioral feedback loops where avoidance behaviors reinforce negative behavior beliefs.

Loss of Pride, Identity, and Place Attachment

Place attachment, the emotional bond between people and their environment, is significantly undermined in neighborhoods with high rates of residential abandonment. According to Lewicka (2011), physical neglect disrupts the symbolic identity of a place, leading residents to experience a loss of pride and identity. This emotional response is fertile ground for cognitive distortions like personalization (“My community’s condition reflects on me”) or generalization (“Everything here is deteriorating”). Beck’s theory highlights how such thoughts can fuel low self-esteem and community disengagement. People may begin to devalue their own worth, interpreting the abandonment as a reflection of their personal or cultural failure. These psychological effects are particularly profound among long-term residents who previously held strong attachments to their community.

Implications for Cognitive Reframing and Community Resilience

Understanding the psychological impact of abandoned buildings through Beck’s theory highlights the importance of cognitive reframing in mitigating distress. CBT-based community interventions could empower residents to challenge distorted perceptions and adopt more balanced interpretations of their environment. For instance, framing an abandoned house not as a sign of decay but as an opportunity for redevelopment or community gardening can shift cognitive appraisals and promote collective efficacy. Moreover, promoting community-led initiatives that foster ownership and re-engagement can help counteract feelings of disconnection and powerlessness. Such strategies align with Beck’s goal of altering negative behavior thinking patterns through behavioral activation and positive reinforcement.

Conclusion

This narrative review underscores how Beck’s Cognitive Theory provides a valuable psychological framework for understanding the impact of abandoned residential buildings on community well-being. The built environment is not merely a physical space; it serves as a powerful trigger for cognitive processes that shape mental health, identity, and social behavior. Elements such as mental health decline, perceived powerlessness, social isolation, loss of pride, and community disconnection are intricately connected through the cognitive-emotional pathways identified in CBT. Future urban policy and mental health interventions should integrate these psychological insights to develop holistic responses that address both environmental decay and the cognitive patterns that sustain its negative impacts. Empowering individuals to reinterpret their surroundings can foster resilience, rebuild community cohesion, and ultimately restore psychological well-being.

3. Theoretical and Conceptual Framework

This narrative review is underpinned primarily by Beck’s Cognitive Theory of Depression, supplemented by frameworks from urban sociology and environmental psychology, particularly theories related to community perception and urban decay. These theories together provide a multidisciplinary lens for understanding how the physical environment, specifically abandoned residential buildings, influences the psychological well-being of residents. Beck’s Cognitive Theory (1976) posits that individuals develop negative thought patterns due to negative external stimuli. These cognitive distortions such as hopelessness, helplessness, and pessimism can become entrenched, especially when individuals are exposed to chronic stressors. In the context of abandoned residential buildings, such environmental degradation is seen not only as a physical eyesore but also as a symbolic representation of neglect, loss of community control, and social decline. These perceptions reinforce negative cognitive schemas that contribute to mental health issues such as anxiety and depression (Beck, 1976).

Community Perception and Urban Sociology The conceptual framework also incorporates insights from community perception theories and the “Broken Windows” theory (Wilson & Kelling, 1982). The latter suggests that visible signs of disorder, such as vacant and dilapidated buildings, signal a lack of social control, encouraging further crime and disinvestment. Community members interpret these signs as evidence of abandonment and neglect, which fosters collective disillusionment and emotional distress (Smith & Brown, 2021). Perception, in this case, becomes a mediating factor in how environmental conditions impact mental health.

Integration in the Research Context In this review, Beck’s Cognitive Theory is applied to explain the internal psychological responses triggered by the external stimuli of urban decay. The theory helps articulate how residents cognitively process the stressors presented by abandoned buildings, leading to various mental health outcomes. Community perception serves as the mediating lens, shaping how residents interpret these stressors either reinforcing negative cognitive patterns or, in some cases, fostering resilience if social cohesion is strong (Wallace, 2018). The framework also considers the moderating role of socio-economic and cultural context, recognizing that perceptions and psychological impacts are not uniform across all communities. For example, low-income communities may experience compounded stress due to limited resources and weaker institutional support, while more affluent areas might perceive abandonment as temporary or manageable through investment and redevelopment.

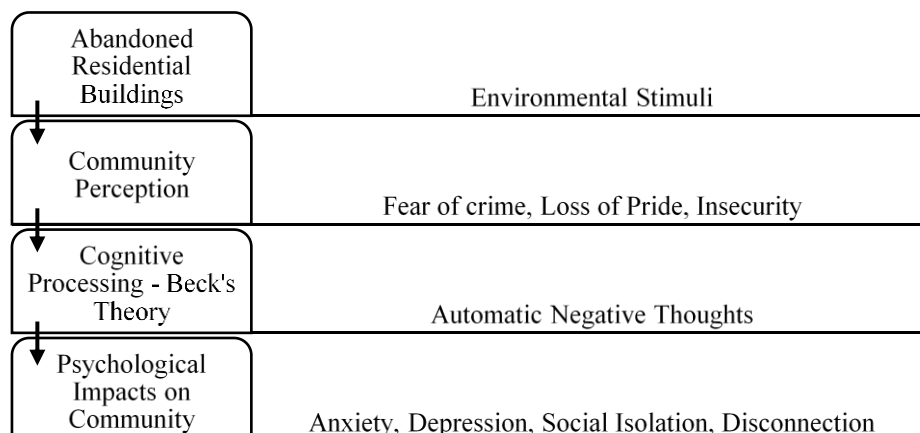


Figure 2: Theoretical and conceptual framework.

With urban and environmental psychology, this framework allows for a nuanced understanding of how psychological harm arises from structural neglect. It emphasizes the importance of addressing both the physical and perceptual aspects of urban decay in public policy and mental health intervention.

4. Methodology

This study adopts a quantitative method approach primarily quantitative data collected from Klang, Selangor. The empirical component is designed to contextualize the theoretical and conceptual insights derived from Beck’s Cognitive Theory within a real urban setting in Klang, Selangor city community. The target population included adult residents living within or around neighborhoods affected by abandoned residential buildings in Klang. Using convenience sampling, a total of 105 respondents were successfully surveyed. The demographic profile included a mix of age groups, genders, ethnic backgrounds, and socio-economic statuses, representing Klang’s multicultural urban demographic. The study is cross-sectional and descriptive in nature. This questionnaire consists of four (4) sections which are stated in Table 1 below. In the first section, the respondent was asked some questions on the demographic profile such as gender, age, living area, and the information regarding to distance and experience in abandoned buildings in terms of location and the vicinity. In the second section, the respondent was asked questions to assess the respondents’ perceptions on the psychological impacts of abandoned buildings. Using a 5 point Likert scale, the respondents were asked to score each statement according to its perceived relevance (1 = strongly disagree and 5 = strongly agree). A greater degree of granularity on the scale provides not only more accurate data but also a higher score variance, more significant statistical conclusions, and fewer responses that are neutral. SPSS software was used to conduct frequency analysis, reliability analysis, correlation analysis and regression analysis.

A structured questionnaire was used to assess residents’ perceptions and psychological responses to abandoned residential buildings in their vicinity. The survey also aimed to explore the extent to which community perceptions align with cognitive and emotional outcomes described in the literature.

Table 1: Instrumentation of sections in the questionnaire.

Section	Title
A	Age, gender, race, education level, and length of residence.
B	Questions assessed perceived causes of abandonment, visual conditions, and emotional reactions.
C	Measured feelings such as fear of crime, social isolation, emotional distress, and mental well-being using a 5-point Likert scale.
D	Respondents provided suggestions for improvement and shared personal reflections.

The instrument was validated by field experts and tested through a pilot study, yielding a Cronbach’s alpha of 0.82, indicating good internal consistency. Quantitative data were analyzed using descriptive statistics and mean ranking in SPSS. The finding in mean values provided insight into which psychological effects were most intensely felt.

5. Results and Discussion

Frequency Analysis

In order to summarize and the data organization, a descriptive analysis was utilized. Table 2 explains and summarizes the demographic profile of the 105 respondents which the majority

were female (55.2%) and aged between 26–35 years (29.5%). Most were Malay (60%), followed by Chinese (26.7%) and Indian (13.3%). A significant number (45.7%) had resided in the affected areas for more than 10 years, suggesting a long-term exposure to the environmental factor.

Table 2: Demographic profile of the respondents.

Demographic	Frequency	Percentage
Gender		
Male	47	44.8%
Female	58	55.2%
Total		
Age		
18-20 years old	12	11.4%
21-30 years old	48	45.7%
31-40 years old	29	27.6%
41-49 years old	12	11.4%
50 years old and above	4	3.9%
Experience of visiting Abandoned Buildings.		
Yes	72	68.6%
No	33	33.3%
Living In or Near Abandoned Buildings		
Yes	75	66.7%
No	30	33.3%
Proximity of Residence to Abandoned Buildings		

Reliability Analysis

The consistency and dependability of a system or process can be assessed using a technique known as reliability analysis, which was previously used in engineering, statistics, and other fields. It is used to evaluate the likelihood that a system or process will work correctly over a certain period of time and under predetermined conditions. Cronbach's Alpha was used to assess the reliability and validity of the items, and the results are displayed in Table 3 (Sheakh, 2014). Table 3 reveals that Cronbach's Alpha for all variables was more than 0.8. This demonstrates that each of the items was reliable and valid. The Cronbach's Alpha score for Awareness, Knowledge, and Cost was 0.963.

Table 3: The Cronbach Alpha reliability levels.

Cronbach's Alpha Value	Reliability Level
≥ 0.9	Very reliable
0.6– 0.8	Reliable
0.4 – 0.6	Reliable enough
0.2 – 0.4	Somewhat reliable
0.0 – 0.2	Less reliable

Cronbach's Alpha (α) = 0.950 indicates excellent internal consistency among the 16 items measured. The reliability analysis shows a Cronbach's Alpha of 0.950, which indicates excellent internal consistency among the 16 items. This suggests that the items are highly correlated and measure the same underlying construct reliably.

Mean Analysis

The second part of the questionnaire (part B) aims to collect details regarding the psychological impact of abandoned buildings on nearby communities. Section B's questions were scored on a five-point Likert scale: 1 for strongly disagreeing, 2 for disagreeing, 3 for neutral, 4 for agreeing, and 5 for strongly agreeing. These measurement items will be used to determine the following impacts: The data gathering resulted in the following data. Furthermore, to analyse the data, the researcher proposed the following scale based on the mean of the data.

Respondents largely perceived abandoned residential buildings as negative elements within the community. The most frequently cited causes of abandonment were: developer bankruptcy (mean = 4.55), poor project management (mean = 4.45), and lack of government enforcement (mean = 4.39). Visually, buildings were described as unsafe, overgrown, and frequently vandalized.

The findings confirmed strong psychological effects, in line with Beck's theory. The top three impacts reported were:

- Fear of crime (mean = 4.68)
- Mental disturbance (mean = 4.45)
- Loss of pride in the neighborhood (mean = 4.40)

Other notable effects included reduced quality of life, emotional disconnection, and avoidance behaviors, such as refusing to allow children to play outdoors.

Relative Importance Index (RII)

The Relative Importance Index (RII) was applied to interpret the perceptions of communities regarding the psychological and social impacts of living near abandoned buildings. Derived from mean scores, the RII values provide a more robust ranking of issue severity, particularly suitable for Likert-scale data. All 16 items in the study recorded high to very high importance levels, with RII values ranging from 0.708 to 0.848. The highest RII (0.848) corresponds to the perception that residential abandoned buildings lead to increased violent crimes, indicating this as the most critical concern among respondents. Other items with high RII scores include concerns about potential criminal activities (0.796), unsafe walking conditions (0.786), and feelings of worry and insecurity within the community. Even less extreme yet still significant responses, such as feeling less connected to the community or ashamed of neighborhood appearance, registered strong RII scores above 0.70. These findings highlight a pervasive perception that abandoned buildings negatively affect safety, mental well-being, social cohesion, and community pride. The RII method effectively prioritizes these issues, suggesting that addressing safety and revitalization efforts may have the greatest impact on improving residents' psychological and social conditions.

RII Formula:

$$RII = \frac{\sum w}{(A \times N)}$$

Where:

- ww = weight given to each response (1 to 5 for Likert scale)
- AA = highest Likert scale point
- NN = total number of respondents

RII Interpretation Scale:

RII Value Range	Interpretation
0.80 – 1.00	Very High Importance
0.60 – 0.79	High Importance
0.40 – 0.59	Moderate Importance
0.20 – 0.39	Low Importance
0.00 – 0.19	Very Low Importance

Table 4: The Relative Importance Index (RII) table.

No.	Statement	Mean	RII	Rank	Interpretation	
1	Increase in violence crimes	4.24	0.848	1	Very High	
	Mental Health and the Built Environment	Concern about potential criminal activities	3.98	0.796	2	High
		Unsafe walking in neighborhood	3.93	0.786	3	High
		Worry about crime due to abandoned buildings	3.92	0.784	4	High
		Mental health impact	3.70	0.740	11	High
2	Implications for Cognitive Reframing and Community Resilience	Community can make a difference	3.87	0.774	6	High
		Reduced social interaction	3.77	0.754	8	High
		Negative impact on social cohesion	3.77	0.754	9	High
3	Social Isolation and Community Disconnection	Reduced sense of connection	3.77	0.754	10	High
		Hard to volunteer	3.70	0.740	12	High
		Less connected due to nearby abandoned buildings	3.62	0.724	15	High
		Perceived Powerlessness and Learned Helplessness	3.65	0.730	14	High
5	Loss of Pride, Identity, and Place Attachment	Sense of belonging: disinvestment and apathy	3.88	0.776	5	High
		Restoring buildings enhances pride	3.86	0.772	7	High
		Embarrassment about community appearance	3.68	0.736	13	High
	Less pride in community	3.54	0.708	16	High	

Based on the table 4, all items fall under “High” to “Very High” relative importance. The top concern based on RII is: “Residential abandoned buildings experience an increase in violence crimes in community” (RII = 0.848).

6. Resident Suggestions and Thematic Reflections

Open-ended feedback revealed a shared desire for government intervention, community-led beautification efforts, and legal reforms to hold developers accountable. Residents expressed a mix of frustration and hope, indicating the potential for resilience if actionable support is provided. These findings offer concrete validation of the conceptual framework and underscore the urgent psychological and social implications of urban abandonment in Klang. The data

confirm that residents' cognitive and emotional responses to abandoned buildings closely align with the distortions outlined in Beck's Cognitive Theory.

7. Future Work and Conclusion

Future Work while this narrative review has synthesized current knowledge on the psychological implications of abandoned residential buildings using Beck's Cognitive Theory and insights into community perception, several avenues remain for future exploration. One of the primary limitations of the current study is its reliance on secondary data and conceptual frameworks, which, although insightful, do not provide empirical validation of the proposed relationships. Future research should therefore incorporate qualitative and quantitative fieldwork, such as surveys, interviews, and observational studies, to directly measure psychological responses among residents living near abandoned structures. Moreover, the existing literature is heavily Western-centric, with limited data from developing countries where urban decay is often more pronounced and socio-economic conditions differ markedly. Comparative cross-cultural studies would deepen our understanding of how cultural norms and economic factors influence community perception and psychological resilience. There is also a need for longitudinal research to track changes in mental health and perception over time, particularly in neighborhoods undergoing revitalization. Additionally, future studies could assess the effectiveness of intervention strategies, such as community-driven redevelopment or greening projects, in mitigating psychological distress. By addressing these gaps, future research can provide more actionable insights for urban planners, policymakers, and mental health professionals, ultimately supporting the development of more psychologically resilient communities in the face of urban decay.

Conclusion This narrative review examined the psychological impact of abandoned residential buildings through the theoretical lens of Beck's Cognitive Theory and the mediating role of community perception. The review highlights that environmental degradation—such as the presence of neglected and deteriorating housing—can function as a chronic stressor, reinforcing negative cognitive schemas that contribute to mental health issues such as anxiety, depression, and social withdrawal. Community perceptions play a crucial role in shaping the psychological outcomes of urban decay, with factors such as social cohesion, socio-economic status, and cultural context influencing whether such environments are internalized as threats or challenges. The synthesis of current literature reveals consistent evidence that abandoned residential buildings not only diminish urban aesthetics but also profoundly affect community well-being. The application of Beck's Cognitive Theory provides a valuable framework for understanding how external environmental stressors translate into internal cognitive and emotional responses. However, the review also uncovers critical gaps, particularly in terms of geographic scope, methodological diversity, and the evaluation of intervention outcomes. Overall, this study contributes to a growing interdisciplinary discourse on urban mental health, offering a conceptual model that links psychological theory with real-world urban phenomena. By emphasizing the interconnectedness of built environments, cognition, and community dynamics, the review underscores the need for holistic urban policies that prioritize both physical redevelopment and psychological resilience. As cities continue to evolve, understanding and addressing the mental health consequences of abandonment will be essential for fostering inclusive and sustainable urban futures.

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Conflict of interest

The authors confirm that there is no conflict of interest involve with any parties in this research study.

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