



Perceived Time Scarcity and Prosocial Decision-Making under Competing Goals

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Abstract: Perceived time scarcity represents a psychological condition in which individuals experience a subjective feeling that available time is insufficient to complete required tasks, achieve personal objectives, or respond effectively to competing demands. In contemporary social and professional environments, individuals frequently encounter situations where personal goals, performance expectations, and responsibilities toward others require simultaneous attention. These situations create complex decision-making challenges in which individuals must evaluate whether to prioritise self-oriented outcomes or engage in actions that provide benefits to others. This conceptual research article examines how perceived time scarcity influences prosocial decision-making when individuals face competing goals. The article develops a theoretical understanding of the cognitive and motivational mechanisms through which limited perceived time may affect attention allocation, self-regulation, goal prioritisation, and social considerations. By integrating perspectives from scarcity theory, cognitive resource theory, self-regulation theory, and behavioural decision-making approaches, the study explains why time scarcity may modify the conditions under which individuals express cooperative and supportive behaviours. The conceptual analysis highlights that perceived time scarcity does not necessarily eliminate prosocial motivation; rather, it can influence the cognitive processes involved in translating social intentions into actual decisions. When individuals perceive limited time availability, immediate personal demands may receive greater cognitive priority, potentially reducing attention toward broader social consequences. However, personal values, social orientation, and self-regulatory capacity may influence whether individuals continue to maintain prosocial choices under demanding conditions. This article contributes to behavioural and social decision-making research by providing a conceptual framework for understanding the relationship between

subjective time constraints and prosocial behaviour. The study highlights the importance of considering psychological perceptions of time rather than only objective time availability when analysing human decision processes.

Keywords: Perceived Time Scarcity; Prosocial Decision-Making; Goal Conflict; Cognitive Resources; Self-Regulation; Social Behaviour; Behavioural Decision Science

1. Introduction

1.1 Background

Human decision-making often occurs within environments characterised by multiple competing demands. Individuals regularly need to balance personal objectives, professional responsibilities, social obligations, and collective expectations within limited periods of time. Although time is an objective resource that can be measured through schedules and deadlines, the psychological perception of having insufficient time plays an important role in shaping how individuals interpret situations and select behavioural responses.

Perceived time scarcity refers to an individual's subjective experience that available time is inadequate in relation to existing demands. This perception can emerge even when objective time availability remains unchanged because individuals evaluate time according to workload, urgency, personal expectations, and competing responsibilities. Unlike simple time limitation, perceived scarcity represents a psychological state that influences attention, cognitive processing, emotional regulation, and behavioural priorities.

In situations involving competing goals, individuals frequently face decisions where personal benefits and social benefits are not perfectly aligned. For example, completing an individual responsibility may conflict with assisting another person, contributing to a group objective, or engaging in supportive behaviour. Such situations require individuals to evaluate not only immediate outcomes but also broader social consequences.

Prosocial decision-making involves choices intended to benefit other individuals, groups, or society. These decisions may require additional effort, delayed personal rewards, or willingness to allocate limited resources toward others. Therefore, when individuals experience strong perceptions of time scarcity, the cognitive and motivational resources required for maintaining prosocial choices may become more difficult to access.

Understanding the relationship between perceived time scarcity and prosocial decision-making is important because modern environments increasingly involve high workloads,

rapid communication demands, and continuous competition between personal and social priorities. Examining this relationship provides insight into how psychological experiences of limited time influence social behaviour beyond simple measures of productivity or task performance.

1.2 Problem Statement

Previous research has extensively examined time pressure, resource scarcity, and decision-making behaviour. However, the relationship between perceived time scarcity and prosocial decision-making under competing personal goals requires further conceptual clarification. Existing perspectives often explain how limited resources influence individual performance and cognitive efficiency, but less attention has been given to how subjective experiences of insufficient time affect decisions involving social responsibility and cooperation.

A central problem is determining whether reduced prosocial behaviour during time scarcity occurs because individuals become less concerned about others or because cognitive limitations make it more difficult to consider socially beneficial alternatives. This distinction is important because prosocial motivation and prosocial behaviour may not always operate under identical conditions.

Therefore, a conceptual examination of perceived time scarcity can provide a deeper understanding of the psychological mechanisms that influence whether individuals prioritise personal goals or maintain consideration for collective outcomes when facing competing demands.

1.3 Research Motivation

The increasing complexity of modern social and professional environments has created situations where individuals must continuously manage competing personal and collective demands. Workplace responsibilities, academic requirements, social commitments, and personal objectives often require individuals to make rapid decisions about how limited time should be allocated. In such circumstances, understanding the psychological influence of perceived time scarcity becomes essential for explaining variations in human decision-making behaviour.

The motivation behind this conceptual research arises from the need to examine time scarcity beyond its traditional interpretation as a productivity or performance-related issue. While limited time is commonly associated with reduced efficiency and increased pressure, it also represents a psychological condition that can influence how individuals process information,

evaluate priorities, and regulate behaviour. A deeper understanding of these processes can explain why individuals may maintain prosocial intentions in some situations while prioritising personal objectives in others.

This research is also motivated by the importance of prosocial behaviour in maintaining cooperation, teamwork, and social relationships. Organisations, educational institutions, and communities depend on individuals' willingness to consider collective interests alongside personal goals. However, environments characterised by continuous urgency and competing demands may create conditions where socially beneficial choices become more difficult to express.

By integrating psychological theories related to scarcity, cognition, self-regulation, and social decision-making, this article aims to provide a conceptual explanation of how perceived time scarcity shapes the balance between personal goal achievement and prosocial decision-making.

2. Literature Review

2.1 Perceived Time Scarcity and Cognitive Resource Allocation

Perceived time scarcity refers to an individual's subjective experience that available time is insufficient to meet existing demands, responsibilities, or desired objectives. Unlike objective measures of time availability, perceived time scarcity represents a psychological interpretation of temporal limitations that can influence attention, cognitive processing, and behavioural regulation. Individuals may experience similar objective time conditions differently depending on workload, personal expectations, urgency perceptions, and competing responsibilities.

Scarcity perspectives suggest that when individuals perceive a shortage of an important resource, their attention becomes increasingly focused on managing immediate demands. In the context of time scarcity, individuals may allocate greater cognitive attention toward urgent tasks, deadlines, and personally relevant objectives. This attentional narrowing can influence decision processes by reducing the consideration of alternatives that require additional cognitive effort, particularly when individuals must balance immediate personal outcomes with broader social consequences.

Cognitive resource perspectives further explain that effective decision-making requires mental capacity for evaluating alternatives, anticipating consequences, and regulating responses. Under conditions of perceived time scarcity, cognitive resources may become

concentrated on resolving immediate challenges, leaving fewer resources available for complex evaluations involving social considerations. As a result, decisions that require perspective-taking, empathy, and consideration of collective outcomes may become more difficult under conditions of high perceived temporal pressure.

However, the relationship between time scarcity and decision behaviour is not uniform across individuals. Personal values, self-regulation ability, social motivation, and previous experiences may influence how individuals respond to limited time conditions. While some individuals may maintain consideration for others despite temporal constraints, others may prioritise immediate personal objectives due to increased cognitive pressure.

Therefore, perceived time scarcity should be understood not only as a limitation of available time but also as a psychological condition that influences attention allocation, cognitive flexibility, and behavioural prioritisation during decision-making.

2.2 Prosocial Decision-Making under Competing Goals

Prosocial decision-making involves choices intended to provide benefits to other individuals, groups, or society. These decisions include cooperation, helping behaviour, sharing, and supportive actions that require individuals to consider outcomes beyond immediate personal interests. Prosocial choices often involve cognitive evaluation, emotional consideration, and willingness to allocate personal resources toward collective benefits.

Existing behavioural research indicates that prosocial decisions are shaped by both internal motivations and situational influences. Factors such as empathy, moral identity, social values, and responsibility perceptions can encourage individuals to consider others' needs. However, situational conditions, including workload demands, stress, resource limitations, and environmental pressure, may influence whether prosocial intentions are translated into actual behaviour.

Competing goals provide an important context for understanding variations in prosocial decision-making. Individuals frequently experience situations where achieving personal objectives conflicts with supporting others or contributing to collective outcomes. For example, completing an urgent individual responsibility may reduce the opportunity to assist another person, while pursuing personal achievement goals may limit participation in cooperative activities.

Perceived time scarcity may intensify these conflicts by creating conditions in which individuals must make decisions with limited cognitive availability. When time is

experienced as insufficient, immediate personal demands may receive greater attention because they appear urgent and directly connected to potential consequences. In contrast, prosocial alternatives may require additional reflection, consideration of others' perspectives, and willingness to accept personal costs.

However, time scarcity does not necessarily eliminate prosocial motivation. Instead, it may influence the extent to which prosocial preferences are accessible during decision-making. Understanding this distinction is important because reduced prosocial behaviour may result either from lower willingness to help or from reduced cognitive opportunity to evaluate socially beneficial alternatives.

2.3 Goal Conflict and Behavioural Prioritisation

Goal conflict occurs when individuals face situations in which pursuing one objective limits the achievement of another. In everyday decision-making, individuals frequently encounter conflicts between personal achievement, task completion, professional responsibilities, and obligations toward others. Resolving such conflicts requires prioritisation based on perceived importance, available resources, expected consequences, and situational demands.

Time availability plays an important role in managing competing goals because sufficient time allows individuals to evaluate multiple perspectives and consider both immediate and long-term outcomes. When individuals perceive adequate time, they may be better able to engage in reflective decision-making and consider broader social consequences.

In contrast, perceived time scarcity may increase the psychological importance of immediate objectives. Urgent demands may capture attention and encourage individuals to adopt faster decision strategies focused on efficiency and immediate outcomes. This process may influence the relative priority assigned to personal goals compared with socially beneficial objectives.

Importantly, perceived time scarcity may not directly alter an individual's underlying values or social motivation. Instead, it may influence which goals receive greater cognitive attention during decision-making. Individuals with strong social values or effective self-regulation abilities may continue to consider collective interests even under conditions of temporal pressure.

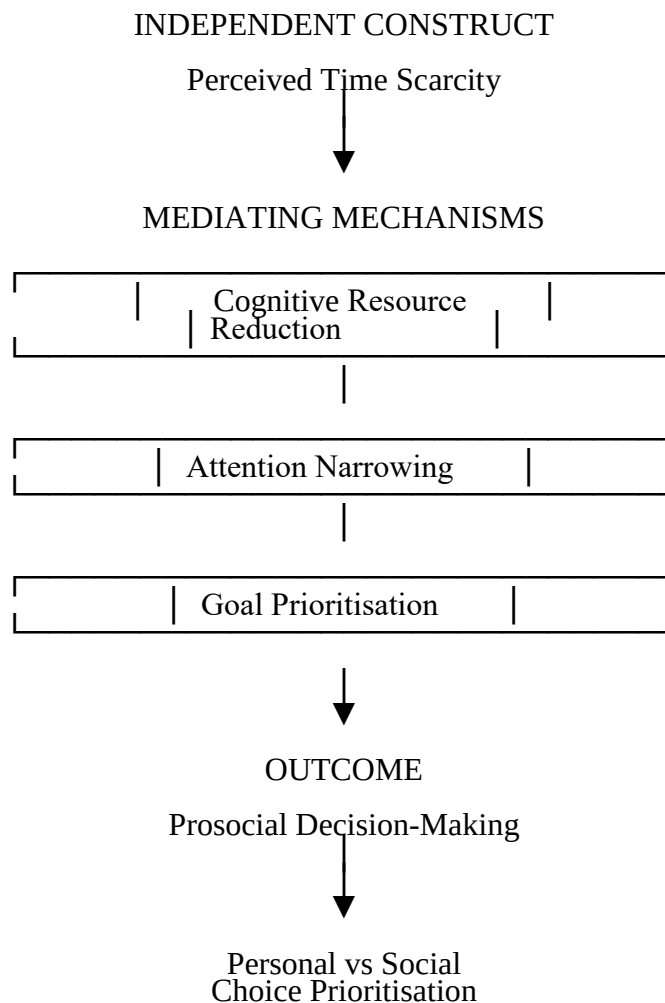
Therefore, examining goal conflict through the perspective of perceived time scarcity provides a more comprehensive understanding of how individuals balance personal achievement and social responsibility. This perspective highlights the interaction between

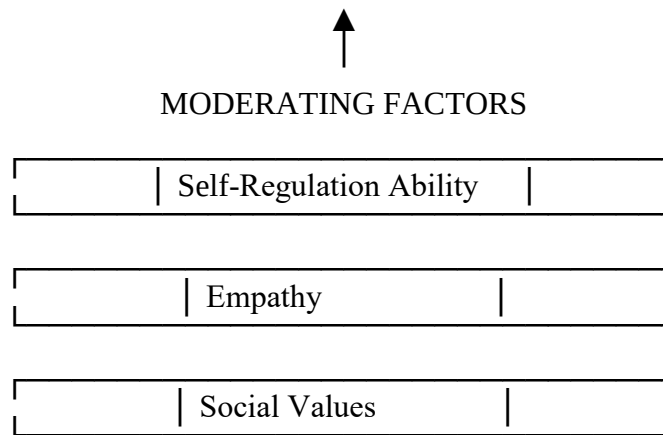
situational constraints and individual psychological resources in shaping behavioural priorities.

3. Figure Caption

Figure 1. Conceptual framework illustrating the relationship between perceived time scarcity and prosocial decision-making under competing goals.

The framework proposes that perceived time scarcity influences prosocial decision-making through three primary cognitive mechanisms: reduced cognitive resource availability, narrowed attentional focus, and altered goal prioritisation. These mechanisms explain how subjective perceptions of limited time may shift decision processes during situations involving conflicts between personal objectives and social benefits. The framework further proposes that individual characteristics, including self-regulation ability, empathy, and social values, may moderate the relationship between perceived time scarcity and prosocial decision outcomes.





Framework Explanation

3.1 Development of the Conceptual Framework

The proposed framework integrates scarcity psychology, cognitive resource perspectives, and prosocial decision-making theories to explain how perceived time scarcity influences behavioural choices under competing goals.

The framework positions perceived time scarcity as the primary antecedent variable because subjective perceptions of insufficient time can influence how individuals allocate cognitive resources and evaluate competing alternatives. Rather than directly assuming that time scarcity reduces prosocial behaviour, the framework proposes that this relationship occurs through cognitive and motivational mechanisms.

First, perceived time scarcity may reduce available cognitive resources by increasing mental focus on urgent demands. Second, it may produce attentional narrowing, causing individuals to concentrate on immediate personal objectives while giving less consideration to broader social consequences. Third, time scarcity may influence goal prioritisation by increasing the relative importance of immediate personal outcomes compared with collective benefits.

The framework further proposes that individual differences may shape these effects. Individuals with stronger self-regulation ability, empathy, and social values may maintain prosocial considerations despite experiencing temporal constraints. Therefore, the relationship between perceived time scarcity and prosocial decision-making is expected to vary depending on personal psychological characteristics.

4. Research Propositions

Based on the integration of scarcity psychology, cognitive resource perspectives, and prosocial decision-making theories, this article develops a set of theoretical propositions

explaining how perceived time scarcity may influence social decision-making under competing personal and collective goals.

Proposition 1: Perceived Time Scarcity and Cognitive Resource Availability

Perceived time scarcity is expected to reduce individuals' cognitive availability for evaluating complex decisions that require consideration of both personal and social consequences. When individuals experience limited available time, cognitive resources may become primarily focused on immediate demands, reducing the capacity for broader evaluation of prosocial alternatives.

Proposition 1: Perceived time scarcity negatively influences cognitive resource availability during decisions involving competing personal and social goals.

Proposition 2: Perceived Time Scarcity and Attentional Narrowing

Perceived time scarcity may create a state of attentional narrowing in which individuals focus more strongly on urgent and personally relevant objectives. This restricted attentional focus may reduce consideration of alternative perspectives and decrease attention toward socially beneficial outcomes.

Proposition 2: Perceived time scarcity increases attentional narrowing, which reduces the consideration of prosocial alternatives during competing goal situations.

Proposition 3: Cognitive Mechanisms and Prosocial Decision-Making

The effect of perceived time scarcity on prosocial decision-making is expected to occur through cognitive mechanisms involving resource allocation and attention management. Reduced cognitive availability and narrowed attention may influence how individuals evaluate social consequences and prioritise competing objectives.

Proposition 3: Cognitive resource reduction and attentional narrowing mediate the relationship between perceived time scarcity and prosocial decision-making.

Proposition 4: Perceived Time Scarcity and Goal Prioritisation

When individuals perceive insufficient time, immediate objectives may receive greater priority because they are associated with urgent consequences and performance demands. As a result, personal goals may become more dominant during decisions involving conflicts between self-interest and collective benefits.

Proposition 4: Perceived time scarcity increases prioritisation of immediate personal goals over prosocial objectives during competing goal situations.

Proposition 5: Role of Self-Regulation Capacity

Although perceived time scarcity may create cognitive pressure, individuals differ in their ability to regulate attention, control responses, and maintain consideration of social outcomes. Individuals with stronger self-regulation capacity may be better able to preserve prosocial decision-making despite temporal constraints.

Proposition 5: Self-regulation capacity moderates the relationship between perceived time scarcity and prosocial decision-making, such that individuals with higher self-regulation are more likely to maintain prosocial choices under time scarcity.

Proposition 6: Role of Empathy and Social Values

Individual differences in empathy and social values may influence how individuals respond to time scarcity. Stronger social orientation may increase the likelihood that individuals continue considering others' needs even when cognitive resources are limited.

Proposition 6: Empathy and social values moderate the relationship between perceived time scarcity and prosocial decision-making by strengthening socially oriented choices under conditions of temporal constraint.

Proposition 7: Integrated Conceptual Relationship

The proposed framework suggests that perceived time scarcity does not directly determine behavioural outcomes alone. Instead, its influence occurs through cognitive and motivational processes that shape attention allocation, goal prioritisation, and evaluation of social consequences.

Proposition 7: The relationship between perceived time scarcity and prosocial decision-making is explained through an integrated mechanism involving cognitive resource availability, attentional focus, and goal prioritisation.

5. Research Gap

Existing behavioural and psychological research has extensively examined the influence of time pressure, resource limitations, and cognitive constraints on human decision-making. Previous studies have demonstrated that limited resources can affect attention, self-regulation, and behavioural priorities. However, much of this research has focused on individual performance, task completion, risk evaluation, or economic decision-making rather than decisions involving personal goals and social responsibilities simultaneously.

A significant gap exists in understanding how **perceived time scarcity** influences prosocial decision-making when individuals must choose between self-oriented objectives and actions

that benefit others. While objective time limitations are commonly studied as external constraints, the subjective perception of insufficient time represents a distinct psychological experience that may influence behaviour through changes in attention, motivation, and cognitive evaluation.

Another limitation in existing literature is that prosocial behaviour is often examined independently from resource-related psychological states. Many studies explore helping behaviour, cooperation, empathy, and social preferences without sufficiently considering how environmental pressures, particularly perceived time shortage, may affect the expression of prosocial intentions.

The interaction between time scarcity and personal-social goal conflict remains theoretically underdeveloped. It is not fully clear whether reduced prosocial behaviour under time scarcity reflects a decrease in social motivation or whether individuals experience difficulty accessing prosocial responses because cognitive resources become focused on urgent personal demands.

This conceptual research addresses these gaps by integrating theories of scarcity psychology, cognitive resource allocation, self-regulation, and behavioural decision-making to explain how perceived time scarcity may influence the balance between personal achievement and collective interests.

6. Novelty / Conceptual Contribution

The primary contribution of this article lies in developing a conceptual understanding of perceived time scarcity as a psychological factor influencing prosocial decision-making rather than treating it only as a practical limitation of available time. The article proposes that subjective experiences of limited time can shape the cognitive conditions under which individuals evaluate competing goals.

This research extends existing discussions on scarcity and decision-making by focusing specifically on the interaction between time-related perceptions and social choices. Instead of examining time scarcity only in relation to efficiency or performance outcomes, this article highlights its potential influence on cooperation, helping behaviour, and collective decision processes.

The conceptual contribution is based on the integration of multiple theoretical perspectives. Scarcity theory explains how limited resources influence attention and cognitive focus, cognitive resource theory explains the impact of mental limitations on decision processes,

self-regulation theory explains behavioural control under pressure, and social decision-making perspectives explain the maintenance of cooperative choices.

The article further contributes by proposing that perceived time scarcity does not automatically eliminate prosocial motivation. Rather, it may create conditions in which personal goals receive greater priority because immediate demands require greater cognitive attention. This distinction provides a more balanced explanation of human behaviour under pressure by recognising the difference between reduced willingness to help and reduced ability to consider helping actions.

The conceptual perspective developed in this article can support future empirical research examining how psychological experiences of time limitation interact with personality characteristics, social values, organisational environments, and decision contexts.

7. Research Objectives / Research Questions

The primary objective of this conceptual research article is to examine the relationship between perceived time scarcity and prosocial decision-making in situations where individuals experience conflicts between personal goals and collective interests. The study aims to develop a theoretical explanation of how subjective perceptions of limited time influence attention allocation, behavioural priorities, and social decision processes.

The article further seeks to understand the psychological mechanisms through which individuals manage competing goals under conditions of perceived time shortage. By analysing existing theoretical perspectives, the research highlights how cognitive limitations, motivational factors, and self-regulation processes interact to influence whether individuals maintain prosocial choices during demanding situations.

The specific research objectives are:

- To examine how perceived time scarcity influences the evaluation of personal and social goals during decision-making processes.
- To analyse the relationship between cognitive resource limitations and the ability to maintain prosocial decision preferences under time-related pressure.
- To explore how individual differences, including social orientation and self-regulation capacity, may influence responses to perceived time scarcity.
- To develop a conceptual understanding of why individuals may prioritise immediate personal objectives while experiencing limited perceived time.

- To identify theoretical directions for future research on time scarcity and prosocial behaviour.

Research Questions

RQ1: How does perceived time scarcity influence the balance between personal goals and prosocial decision-making?

RQ2: Through which cognitive and motivational mechanisms does perceived time scarcity affect social decision processes?

RQ3: Why do some individuals maintain prosocial choices despite experiencing strong perceptions of limited time?

RQ4: How can theories of scarcity, self-regulation, and behavioural decision-making explain goal prioritisation under time constraints?

8. Conceptual Framework / Theoretical Analysis

The relationship between perceived time scarcity and prosocial decision-making can be understood through an integrated conceptual perspective that combines scarcity psychology, cognitive resource allocation, self-regulation, and behavioural decision-making theories. This framework proposes that perceived time scarcity influences not only the amount of time available for action but also the way individuals process information, prioritise goals, and evaluate social consequences.

The central assumption of this conceptual framework is that perceived time scarcity creates a psychological state in which individuals experience pressure to allocate limited cognitive resources toward immediate demands. When personal goals become urgent, attention may become concentrated on achieving individual outcomes, reducing the cognitive space available for considering broader social consequences. However, this process is influenced by individual characteristics such as social values, empathy, moral identity, and self-regulatory ability.

The framework suggests that prosocial decision-making under competing goals is not determined by time scarcity alone. Instead, it emerges from the interaction between situational pressure and individual psychological resources. Individuals who possess stronger social motivation or effective self-regulation mechanisms may continue to consider collective benefits even when experiencing limited perceived time.

8.1 Scarcity Psychology Perspective

Scarcity psychology explains that when individuals perceive a shortage of an important resource, their attention becomes strongly directed toward managing that shortage. In the case of time scarcity, individuals may experience increased mental focus on deadlines, unfinished responsibilities, and immediate personal demands.

This attentional narrowing can influence decision-making by reducing the consideration of alternatives that require additional cognitive effort. Prosocial choices often involve evaluating the needs of others, anticipating long-term consequences, and accepting personal costs. Under conditions of perceived time scarcity, these additional cognitive requirements may become more difficult to process.

However, scarcity does not necessarily result in selfish behaviour in every situation. The effect of scarcity depends on the importance individuals assign to social goals and their ability to regulate attention and behaviour. Therefore, scarcity psychology provides an explanation of how time pressure can influence decision processes while recognising the role of personal differences.

8.2 Cognitive Resource Allocation Perspective

Decision-making requires cognitive resources for analysing information, comparing alternatives, and predicting consequences. When individuals perceive that available time is insufficient, cognitive resources may become concentrated on resolving urgent tasks rather than exploring multiple perspectives.

From this perspective, reduced prosocial decision-making under time scarcity may occur because individuals have fewer opportunities to engage in reflective consideration. Personal goals often provide immediate and measurable outcomes, whereas prosocial choices may require additional evaluation of social consequences.

The cognitive resource perspective therefore suggests that time scarcity can influence the decision pathway rather than directly changing underlying values. An individual may continue to value cooperation and social responsibility but may experience difficulty expressing these values when cognitive demands become excessive.

8.3 Self-Regulation and Goal Management Perspective

Self-regulation plays an important role in managing conflicts between personal objectives and social responsibilities. Individuals frequently need to control immediate impulses, delay

personal benefits, and consider broader consequences when making socially responsible decisions.

Perceived time scarcity can challenge self-regulation because urgent demands may increase psychological pressure and reduce the ability to maintain balanced goal consideration. When individuals experience continuous time-related demands, they may adopt decision strategies focused on efficiency and immediate completion.

Nevertheless, strong self-regulation abilities may support the maintenance of prosocial behaviour even under demanding conditions. Individuals with clear personal values and established behavioural priorities may be better able to integrate social considerations into their decision processes.

8.4 Behavioural Decision-Making Perspective

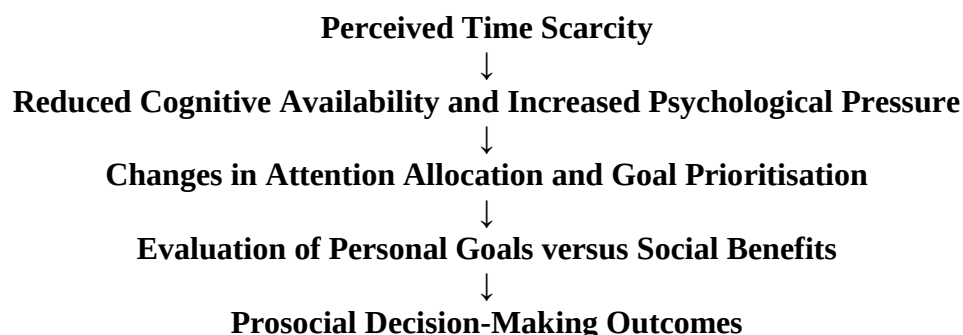
Behavioural decision-making theories emphasise that human choices are influenced by cognitive limitations, contextual factors, and psychological perceptions. Decisions are not always based on complete information processing; instead, individuals often rely on simplified strategies when facing complex situations.

Perceived time scarcity represents an important contextual factor that can influence how individuals evaluate competing goals. Under limited perceived time, individuals may give greater importance to immediate outcomes and reduce attention toward delayed or socially distributed benefits.

This perspective highlights that prosocial decision-making involves a balance between personal utility and collective welfare. Time scarcity may shift this balance by increasing the psychological importance of immediate personal objectives, particularly when individuals perceive that failing to achieve those objectives may create significant consequences.

Conceptual Relationship Model

The conceptual relationship can be represented as:



This framework indicates that perceived time scarcity acts as a contextual influence that shapes the decision environment rather than directly determining behavioural outcomes. The final decision depends on the interaction between situational pressure, individual motivation, and self-regulation capacity.

9. Methodology

9.1 Research Design

This article adopts a conceptual research design based on theoretical analysis and synthesis of existing behavioural, psychological, and decision-making perspectives. Unlike empirical research designs that involve participant-based data collection, conceptual research focuses on developing explanations, integrating theoretical knowledge, and identifying relationships among important constructs.

The methodological approach used in this article involves analysing established theories related to scarcity, cognition, self-regulation, and prosocial behaviour to develop a comprehensive understanding of how perceived time scarcity may influence decision-making under competing goals.

9.2 Conceptual Approach

The conceptual approach integrates multiple theoretical domains to explain the relationship between psychological perceptions of limited time and social decision behaviour. The analysis focuses on four major constructs:

- **Perceived Time Scarcity:** The subjective experience that available time is insufficient compared with existing demands.
- **Cognitive Resource Availability:** The mental capacity available for evaluating alternatives, processing information, and considering consequences.
- **Goal Conflict:** The situation in which personal objectives compete with responsibilities toward others.
- **Prosocial Decision-Making:** Choices involving cooperation, support, sharing, or actions intended to benefit others.

The interaction among these constructs provides a theoretical explanation of how time-related psychological pressure may influence behavioural priorities.

9.3 Theoretical Foundations

The conceptual analysis of perceived time scarcity and prosocial decision-making is supported by several established theoretical perspectives that explain how individuals respond to limited psychological resources and competing objectives. These theories provide a foundation for understanding why perceived limitations in time may influence attention, motivation, and behavioural choices without assuming that social values are permanently altered.

Scarcity theory explains that individuals experiencing a shortage of resources often develop a stronger cognitive focus on managing immediate demands. When the scarce resource is time, individuals may concentrate their attention on urgent responsibilities and personally significant outcomes. This concentration can influence how alternative choices are evaluated, particularly when prosocial decisions require additional effort, reflection, or delayed personal benefits.

Cognitive resource perspectives further suggest that decision-making requires mental capacity for evaluating consequences, controlling impulses, and considering multiple perspectives. Perceived time scarcity may reduce the availability of these cognitive resources by increasing pressure and reducing opportunities for careful evaluation. As a result, individuals may rely more on simplified decision strategies that prioritise immediate and achievable outcomes.

Self-regulation theory provides another important explanation by highlighting the role of behavioural control in managing competing goals. Prosocial choices often require individuals to regulate personal preferences and consider broader social consequences. Under conditions of perceived time scarcity, maintaining this balance may become more challenging because immediate personal demands may require greater psychological attention.

Together, these theoretical perspectives suggest that perceived time scarcity influences prosocial decision-making through changes in cognitive focus, resource allocation, and goal management processes.

10. Discussion / Critical Discussion

10.1 Perceived Time Scarcity as a Psychological Decision Context

The conceptual analysis indicates that perceived time scarcity should be understood as a psychological decision context rather than merely a limitation of available hours. Individuals do not respond only to the objective amount of time available; they respond to their

interpretation of whether that time is sufficient to manage existing demands. This perception influences how individuals organise attention, evaluate priorities, and select behavioural responses.

When individuals experience strong perceptions of limited time, immediate responsibilities may become more cognitively prominent. Personal goals associated with deadlines, performance expectations, or direct consequences may receive greater attention because they appear urgent and personally relevant. In contrast, prosocial choices may require broader consideration of others' needs, future consequences, and collective outcomes.

However, interpreting time scarcity only as a factor that decreases cooperation would provide an incomplete understanding. Prosocial behaviour is influenced by stable individual characteristics, including personal values, social identity, empathy, and moral commitment. Individuals who strongly identify with cooperative values may continue to consider social outcomes even when experiencing significant time-related pressure.

Therefore, perceived time scarcity functions as a condition that influences the accessibility of prosocial decision processes rather than completely determining behavioural outcomes. The interaction between situational pressure and individual psychological resources remains central to understanding social decision-making.

10.2 Cognitive Mechanisms Linking Time Scarcity and Prosocial Choices

A key mechanism connecting perceived time scarcity with prosocial decision-making is the allocation of cognitive attention. Decision-making requires individuals to evaluate available alternatives, anticipate consequences, and compare competing objectives. When time is perceived as insufficient, individuals may experience pressure to simplify this evaluation process.

Prosocial decisions frequently involve complex consideration because they require individuals to move beyond immediate personal outcomes and evaluate benefits for others. Under conditions of perceived scarcity, individuals may have fewer cognitive opportunities to engage in such extended evaluation. This does not necessarily indicate reduced concern for others; rather, it may reflect changes in the decision environment.

The influence of cognitive pressure can also affect decision confidence. When individuals believe that insufficient time is available, they may experience uncertainty regarding whether their decisions adequately address competing goals. This uncertainty may encourage choices that appear safer, more immediate, or more directly connected to personal responsibilities.

From this perspective, time scarcity influences prosocial decision-making by shaping the cognitive pathway through which choices are processed. Understanding this mechanism helps distinguish between a reduction in prosocial motivation and a reduction in the ability to express prosocial preferences under pressure.

10.3 Balancing Personal Goals and Collective Interests

Competing goals represent a common feature of human decision-making. Individuals frequently need to balance personal achievement, career objectives, academic responsibilities, and social commitments. The challenge becomes greater when these goals require different types of resources and cannot all be achieved simultaneously.

Perceived time scarcity can intensify these conflicts by increasing the psychological importance of immediate objectives. When individuals believe that time is limited, they may prioritise goals that appear essential for avoiding negative consequences or achieving immediate rewards. This process can influence the relative importance assigned to personal versus collective outcomes.

Nevertheless, maintaining prosocial behaviour under pressure remains possible when individuals possess strong behavioural priorities and effective self-regulation strategies. Social values can act as guiding principles that help individuals maintain consideration for others even when situational demands increase.

The conceptual perspective developed in this article therefore suggests that prosocial decision-making under time scarcity represents an interaction between environmental pressure and internal motivational resources. Future research should examine how different personal and contextual factors influence this balance.

11. Research Contribution / Implications

This conceptual research contributes to behavioural decision science by expanding the understanding of time scarcity beyond productivity and efficiency outcomes. It highlights that perceptions of limited time can influence social decision-making processes by affecting attention, cognitive evaluation, and goal prioritisation.

The article provides theoretical value by integrating scarcity psychology, cognitive resource perspectives, self-regulation theory, and prosocial behaviour research into a unified explanation. This integrated perspective helps explain why individuals may behave differently under similar time constraints depending on their values, motivations, and psychological resources.

The conceptual implications include:

- **Behavioural Science Implication:** The study highlights the importance of considering subjective experiences of time when analysing human decision-making and social behaviour.
- **Organisational Implication:** Work environments should recognise that excessive perceptions of time pressure may influence cooperation, teamwork, and supportive behaviour.
- **Educational Implication:** Learning environments can consider how workload and deadline structures affect students' ability to engage in collaborative and socially responsible actions.
- **Decision-Making Implication:** Understanding cognitive responses to time scarcity can support the development of strategies that encourage balanced personal and social decision processes.

12. Limitations

This conceptual research article provides a theoretical explanation of the relationship between perceived time scarcity and prosocial decision-making; however, several limitations should be considered. The primary limitation is that the study is based on conceptual analysis rather than empirical data collection. Although theoretical integration provides valuable insights into possible behavioural mechanisms, the proposed relationships require further validation through systematic empirical investigations involving diverse populations and decision contexts.

Another limitation relates to the complexity of human decision-making processes. Prosocial behaviour is influenced by multiple psychological, social, and environmental factors, including empathy, personality characteristics, cultural values, social relationships, and situational expectations. While this article focuses on perceived time scarcity as an important influencing factor, it does not provide an exhaustive explanation of all variables that may affect decisions involving personal and collective interests.

The conceptual framework also primarily examines short-term decision processes under perceived time limitations. However, individuals exposed to continuous time pressure over extended periods may develop different adaptation strategies, behavioural patterns, or coping mechanisms. Long-term experiences of workload pressure, organisational demands, or

repeated resource limitations may influence decision-making differently from temporary perceptions of time scarcity.

Additionally, the interpretation of perceived time scarcity may vary across individuals and social contexts. Different people may experience the same objective situation differently depending on their personal expectations, previous experiences, cultural background, and coping abilities. Therefore, future empirical research should examine how individual differences influence the relationship between time scarcity and prosocial decision-making.

13. Future Work

Future research should empirically examine the conceptual relationships proposed in this article through controlled behavioural studies, field investigations, and longitudinal research designs. Such studies can provide deeper insights into how perceived time scarcity influences actual prosocial decisions across different social and professional environments.

Further research should investigate the moderating role of individual psychological characteristics, including empathy, self-control, moral identity, social orientation, and emotional regulation. These factors may explain why some individuals continue to demonstrate cooperative behaviour under conditions of high perceived time pressure while others become more focused on personal objectives.

Future studies may also explore how organisational and educational environments influence the relationship between time scarcity and prosocial behaviour. Workplace cultures, teamwork structures, workload management practices, and institutional expectations may either strengthen or reduce the negative influence of excessive time pressure on cooperation.

Another important research direction involves examining technological and digital environments where individuals frequently experience rapid information demands and continuous deadlines. Understanding how digital communication, multitasking expectations, and virtual collaboration influence perceived time scarcity can provide additional insights into contemporary decision-making challenges.

Future theoretical development may also consider integrating emotional, social, and contextual factors into existing models of scarcity and decision-making. A broader interdisciplinary approach involving psychology, behavioural economics, organisational studies, and social sciences may provide a more comprehensive understanding of prosocial behaviour under conditions of limited perceived time.

14. Declarations

Conflict of Interest

The author declares that there is no conflict of interest associated with the development, analysis, interpretation, or presentation of this conceptual research article.

Funding Statement

This research article did not receive any external financial support from governmental, commercial, or institutional funding agencies. The study was developed independently for academic and scholarly purposes.

Ethics Statement

This article is based on conceptual analysis and does not involve human participants, experimental intervention, or collection of personal data. Therefore, institutional ethical approval was not required for this theoretical research work.

Data Availability Statement

No empirical dataset was generated or analysed in this conceptual research article. The study is based on theoretical analysis and synthesis of existing scholarly literature.

Author Contribution Statement

The author contributed to the conceptual development, theoretical analysis, interpretation of relevant perspectives, manuscript preparation, and final approval of the article.

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