Investing in Goals and Means

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Goal pursuit necessarily requires resource investment. And these resources often need to be allocated across goals and means. For example, college students need to spend time studying for both prerequisites (invest in means) and core courses (invest in goals). Marathon runners need to exert effort competing in both qualifying races (invest in means) and marquee events (e.g., the New York City Marathon; invest in goals). Shoppers at big-box warehouse clubs need to pay money for both membership (invest in means) and goods (invest in goals).

Moreover, these resources (e.g., time, effort, money, etc.) are scarce (Samuelson, 1980). In other words, time spent studying in the library is time not spent socializing at parties; effort exerted at the gym is effort not exerted on yardwork; money spent on gifts is money not spent on bills. For no person are these (and other) resources limitless. And so a fundamental question—indeed, perhaps *the* most fundamental question—for goal systems theory (GST; Kruglanski et al., 2002) is how people choose to allocate their scarce resources across goals and means during the course of goal pursuit.

In this chapter, I explain how the architecture of goal systems systematically shapes judgment and decision making with respect to the allocation of such scarce resources. Specifically, drawing from past work (Shaddy & Fishbach, 2018), I explain why people prefer to directly invest resources in goals, rather than indirectly invest resources in means to achieve those goals, even when goal attainment and total resource investment are held constant.

Importantly, this is a theoretical question that yields numerous implications for better understanding consumer behavior, in particular, and motivation, more broadly. And while I primarily focus here on how consumers choose to spend money (to more clearly explicate this account), the conceptual framework I propose should just as readily govern the allocation of *any* scarce resource across goals and means. In the following sections, I offer a general framework

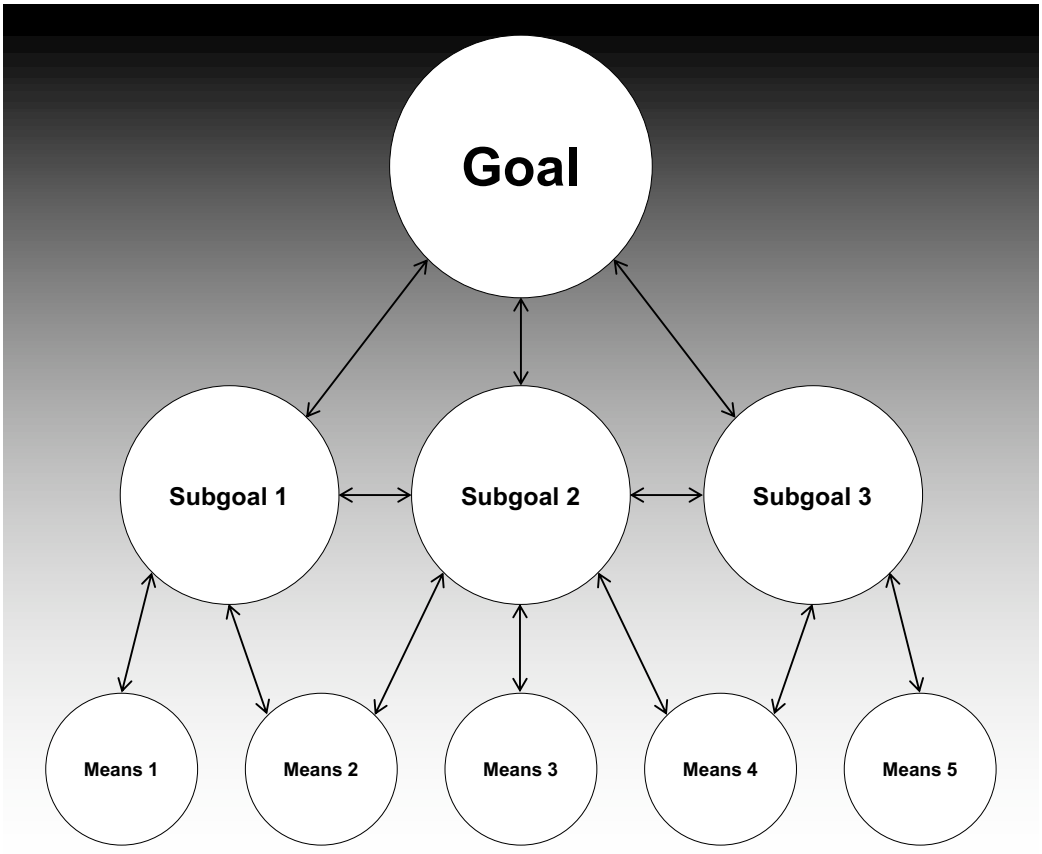
for resource allocation, highlight consequences for consumer behavior, and discuss opportunities for future research.

The Architecture of Goal Systems

Goal systems are organized hierarchically, such that higher-order goals, which sit atop the hierarchy, are served by subgoals and lower-order means (Figure 1). Goal pursuit, therefore, often requires people to invest resources *vertically*, both in various means that facilitate goal attainment, as well as in goals directly. For example, when a shopper at a big-box warehouse club (e.g., Costco) spends money on the membership fee, she is investing resources in a means; when she spends goods purchased at the store, she is investing resources in a goal.

Yet previous research has largely focused on how people choose to allocate resources *horizontally*, between various means to a given goal, or between various goals themselves. Central to these findings is the distinction between multifinality—when a single means can help achieve multiple goals—and equifinality—when multiple means can help achieve a single goal (Kruglanski et al., 2015). And this work has documented a robust preference for instrumental means (i.e., actions that have fewer substitutes). For example, an implication is a dilution effect, whereby a means that serves multiple goals (in a multifinal configuration) is viewed as less instrumental (i.e., effective) for any particular goal, compared with a means that serves only that goal (Zhang, Fishbach, & Kruglanski, 2007). Such dilution occurs because the cognitive linkages between a means and multiple goals (as opposed to a single goal) reduce the associative strength between it and any particular goal.

Figure 1. In the architecture of goal systems, goals sit atop the hierarchy. Thus, whenever individuals are required to invest resources across goals and means, they perceive investing resources in goals as a direct investment in goal attainment (i.e., higher in the goal hierarchy). Investing resources in means, on the other hand, is perceived as an indirect investment (i.e., lower in the goal hierarchy).



Meanwhile, equifinality can yield a number of similarly meaningful implications for motivation. For example, the availability of multiple means for a goal can increase commitment to that goal, by increasing the perceived expectancy of achievement (e.g., if one means fails, another can be recruited in its place; Kruglanski, Pierro, & Sheveland, 2011). An equifinal configuration can also boost the perceived value of achievement. Put differently, that there are multiple means available for achieving a particular goal suggests it is indeed a goal worth achieving (relative to when only a single means is available; Kruglanski et al., 2014).

Paying for Goals and Means

As noted, however, although past work has largely focused on how people choose to allocate resources horizontally (e.g., between various means and between various goals), resources do nevertheless need to be allocated across goals and means simultaneously. As a result, recent work has begun to probe preferences for the allocation of resources vertically, between the higher- and lower-order elements of goal systems (e.g., superordinate goals vs. subgoals, subgoals vs. means, etc.). These findings have suggested that when given the opportunity, people systematically prefer to shift resources away from means and toward goals, even when doing so would be inconsequential or costly (Shaddy & Fishbach, 2018).

For example, suppose a reader is excited about the upcoming release of a new book and plans to spend $30. Two online retailers are accepting preorders: One is offering the book for $25, with $5 in shipping charges, while the other is offering the book for $20, with $10 in shipping charges. Holding all else constant (e.g., shipping speed/reliability, refund policy, the book itself, etc.)—and, importantly, given that achieving the goal (i.e., acquiring the book) is

equally assured in both cases—would our reader nevertheless prefer one retailer over the other? From a purely economic standpoint, there is no difference between the two. Either way, she must pay $30. But given that people prefer to pay more for goals and less for means (holding all else constant), she actually prefers the former option to the latter (Shaddy & Fishbach, 2018).

Unsurprisingly, this preference for shifting resources from means to goals spills over into willingness-to-pay (WTP) for goals and means. For example, in one study, we asked participants to evaluate both an eight-inch chef's knife and a premium walnut cutting board, and then we manipulated which item was presented as the goal and which item was presented as the means. Specifically, we told participants either (a) that they would need a chef's knife (the means) in order to use the cutting board (the goal), or (b) that they would need a cutting board (the means) in order to use a chef's knife (the goal). We then measured WTP for each item. Consistent with our account, participants were willing to pay, on average, $17.17 for the chef's knife when it was framed as the goal and only $14.04 when *the exact same item* was framed as a means; conversely, participants were willing to pay, on average, $16.81 for the cutting board when it was framed as the goal and only $14.43 when it was framed as a means.

It is also worth noting that consumers sometimes either pay for goals directly (where 100% of resource investment is shifted to the goal) or pay for means to acquire goals indirectly (where 100% of resource investment is shifted to the means). For example, late-night television infomercials are known to offer free products as long as customers pay for shipping; drink minimums are often required at otherwise free comedy shows; some museums offer free admission, but require visitors to make a donation. Our account thus potentially suggests that forcing people to pay for means (when they would rather pay for goals) might suppress overall

WTP in nonnormative ways—especially given that means are frequently bundled with goals (e.g., a $25 book is bundled with a $5 shipping cost; Shaddy & Fishbach, 2017).

To test this possibility, we conducted a second-price auction for a book signed by a well-known business school professor at the University of Chicago (Richard Thaler). Students either submitted bids for the autographed book (resulting in 100% resource investment in the goal) or submitted bids for a branded tote bag that contained the autographed book (resulting in 100% resource investment in the means). As such, we held constant the goal (e.g., acquiring the autographed book) and manipulated only whether resource investment would be direct or indirect (i.e., payment would be for either the means or goal). What we found might shock an economist: Bids for the autographed book averaged $23.38, while bids for the tote bag *containing the same autographed book* averaged $12.18. Notably, the tote bag retailed for $16.98, suggesting that it actually created negative utility when framed as a means to a desired end.

Implications for Resource Investment

The preference to shift resources from means to goals is not limited only to money, of course. Consumers exchange many other resources for goods and services in the marketplace (e.g., time, energy, etc.; Shaddy & Shah, 2018, 2021). For example, in another study, we presented participants with two news articles. For half of the participants, we framed the articles as forming a goal-means dyad, such that the first article represented the means by which readers could achieve the goal of comprehending the second article. For the other half, we framed each article as a separate goal, such that participants aimed to comprehend both. We then measured

how long participants spent reading each, finding that the presence of a goal-means relationship between the articles caused participants to spend less time reading the article framed as a means (96 seconds), relative to the article framed as the goal (120 seconds). By contrast, when both articles were framed as separate goals, participants spent less time reading the first (93 seconds) than the second (103 seconds).

Consumers frequently make intertemporal choices, as well. And one relevant insight with respect to event timing (Huang, 2022; Shaddy et al., 2021, 2022) is that pushing a cost farther into the future effectively reduces its magnitude, due to temporal discounting (Frederick et al., 2002; Urminsky & Zauberman, 2016). As such, resolving intertemporal trade-offs can be thought of as simply another way to shift resource investment (Roberts et al., 2021; Shaddy & Fishbach, 2016; Shaddy, Fishbach, & Simonson, 2021). Therefore, if people prefer to pay more for goals and less for means, they should likewise prefer delaying the cost of a means for as long as possible (more so than the cost of a goal). In a study testing this prediction, we presented participants with two equally-priced items (e.g., beach towels and a tote bag), which either maintained a goal-means relationship (e.g., the tote bag served as a means for carrying and using the beach towels) or were ostensibly unrelated. We then described a credit card promotion in which one item could be paid for one year later, without interest. Participants were more likely to delay payment of the tote back when it was construed as a means.

Finally, consumers also often control whether they pay for goals and means, depending on how they use discounts, coupons, and promotional offers (Shaddy & Lee, 2020). For example, a $5 retail voucher could be used to reduce the cost of a new book or the cost of shopping. If people are more willing to invest resources in goals, relative to means, they should choose, whenever possible, to reduce costs associated with means. And this is exactly what we

found in a study that asked participants to apply tuition waivers, credits, and promotional vouchers to various goals and means. They consistently expressed a stronger desire to eliminate costs associated with means—for example, by applying a tuition waiver to a prerequisite class (a means), rather than a core class (the goal)—thereby shifting a greater proportion of resource investment toward goals (Shaddy & Fishbach, 2018).

Potential Moderators

An implication of this account is that variables that affect the relative importance of goals and means should, in turn, moderate the preference to shift resources from means to goals (Table 1). For example, goal proximity—the closer someone is to achieving a goal—has been shown to increase the value of that focal goal (Kivetz, Urminsky, & Zheng, 2006). If the value of a focal goal increases (e.g., due to goal proximity), then the relative importance of an associated means necessarily decreases. So, when a new book is about to be released, the preference to pay $25 for the book (the goal) and $5 for shipping (the means), versus $20 for the book (the goal) and $10 for shipping (the means), should be stronger when the book is going to be released in one week, relative to one year. This is because temporal proximity makes the focal goal more valuable in the former case, relative to the latter. As a result, the desire to directly invest resources in goals, rather than indirectly invest resources in means to achieve those goals, should be heightened.

In the following section, I outline a number of potential moderators, each of which should either attenuate or exacerbate the preference for shifting resources from means to goals. These variables thus characterize meaningful opportunities for future research.

Table 1. Potential moderators. Variables that affect the relative importance of goals and means should, in turn, moderate the preference to shift resources from means to goals.

A.	**Dynamics of Goal Pursuit**	
1.	Goal Proximity	Goal proximity increases the preference to shift resources from means to goals, by increasing motivation for the focal goal
2.	The Nature and Number of Goals and Means	When the nature (e.g., similar vs. dissimilar) or number (e.g., few vs. many) of goals and means increases motivation for the focal goal, the preference to shift resources from means to goals increases
B.	**Situational Factors**	
3.	Construal Level	Abstract mindsets increase the preference to shift resources from means to goals. This is because high-level construal disproportionately benefits goals, which are inherently more abstract—reinforcing the importance of the focal goal
4.	The Interconnected Self	When social context facilitates goal pursuit—boosting motivation for a focal goal—it magnifies the desire to directly invest resources in goals, triggering a stronger preference to shift resources from means to goals
C.	**Individual Factors**	
5.	Attributions	"Manufactured" goal progress and vicarious goal fulfillment can reduce the relative importance of a focal goal, thereby attenuating the preference to shift resources from means to goals. Conversely, when self-diagnosticity increases the importance of means (because they signal identity) and when individuals shield goals to protect their attainment (increasing the importance of a focal goal), the preference to shift resources from means to goals increases
6.	Individual Differences	People who chronically highlight (vs. balance) and those who maintain a promotion (vs. prevention) focus will be more likely to shift resources from means to goals. This is because "highlighters" still value a focal goal after making progress and promotion focus makes more salient the hierarchical relationship between goals and means
7.	Scarcity and Depletion	To the extent that the availability of mental resources helps people focus on the importance of achieving their goals, cognitive scarcity decreases the preference to shift resources from means to goals (undermining the relative importance of a focal goal)

A. Dynamics of Goal Pursuit

1. Goal Proximity

As both humans and animals get closer to achieving a goal, they tend to increase their effort in achieving that desired outcome (Locke & Latham, 1984). For example, rats run more quickly as they approach food (Hull, 1934); consumers accelerate coffee purchases the closer they are to earning a free beverage (Kivetz et al., 2006); and donors are more likely to give to charity when the organization is closer to hitting a fundraising target (Cryder et al., 2013). This so-called goal gradient effect (Nunes & Dreze, 2006) reflects a basic feature of the dynamics of goal pursuit. More broadly, the small area hypothesis (Koo & Fishbach, 2012) suggests that it arises, in part, because paying attention to progress remaining is more motivating when there is less of it (e.g., "10% remaining" carries more impact than "90% completed"). Similarly, paying attention to progress accumulated is more motivating when there is less of it (e.g., "10% completed" carries more impact than "90% remaining").

Therefore, if perceived progress increases the relative importance of a focal goal (with respect to an associated means), then it should also strengthen the desire for direct investment in goal attainment (i.e., investing resources higher in the goal hierarchy). As a result, individuals should feel a stronger desire to shift resources from means to goals. For example, actions can be interpreted either as conveying commitment or making progress (Fishbach & Dhar, 2005). And when actions reflect progress, rather than commitment, individuals have been shown to relax their pursuit of the focal goal. So, a commitment mindset should heighten the preference for shifting resources from means to goals. Or consider that when progress is low, concrete thinking can hurt motivation; when progress is high, however, it can help (Gollwitzer & Sheeran, 2009;

Townsend & Liu, 2012). Thus, concrete construal, coupled with goal proximity should increase WTP for goals, relative to means.

2. The Nature and Number of Goals and Means

During goal pursuit, the nature and number of available means can meaningfully shape motivation. For example, the availability of a greater number of means tends to increase commitment to a focal goal (Kruglanski, Pierro, & Sheveland, 2010). And when progress is low, people prefer different means (i.e., a variety of options; Etkin, 2022; Etkin & Ratner, 2012) and fewer means (i.e., a lower number of options; Huang & Zhang, 2013). Moreover, when imagining goal attainment in the distant future (vs. the near future), people prefer similar means (Etkin & Ratner, 2013). So, for example, gymgoers expressed greater WTP for training sessions that exercised similar muscle groups in the distant future and different muscle groups in the near future. These factors together suggest that the nature (e.g., similar vs. dissimilar) and number (e.g., few vs. many) of means can change the relative importance of a focal goal. And, as noted, when the relative importance of a focal goal increases, the desire for direct investment in goal attainment likewise increases, strengthening the desire to shift resources from means to goals.

Relatedly, the nature and number of *goals* matters, as well. For example, the dilution model of self-regulation (Zhang et al., 2007) argues that increasing the number of goals (e.g., building muscles and losing weight) that a particular means (e.g., exercising) can satisfy tends to reduce perceived instrumentality (i.e., effectiveness). As a result, these multifinal means (i.e., when a single means serves multiple goals) are less likely to be chosen, relative to means that serve only a single goal. In the former case, therefore, the relative importance of the focal goal is heightened, compared with the latter case. And so too should the desire to shift resource investment from means to goals.

Finally, when people are intrinsically motivated, the preference to shift resources from means to goals should also attenuate. This is because when people are intrinsically motivated, they cannot separate pursuit of an activity from receipt of its benefits. In these situations, when individuals are intrinsically motivated, they experience a fusion between means and ends (Kruglanski et al., 2018; Woolley & Fishbach, 2017, 2022). Meanwhile, the literature has identified a variety of factors that either increase or decrease the likelihood of such fusion occurring. For example, associative strength between goals and means (Bélanger et al., 2015), repeated pairings between goals and means over time (Kruglanski et al., 1975), and shorter temporal distance between goals and means (Woolley & Fishbach, 2017) can increase intrinsic motivation. This, in turn, should attenuate the preference to shift resources from means to goals, because, in a sense, means are now experienced *as* goals (when intrinsic motivation is high).

B. Situational Factors

3. Construal Level

Construal level (Trope & Liberman, 2010) should also play a role—particularly when an abstract mindset boosts the relative importance of higher-order goals. This is consistent with working showing that abstract construal helps link an action to its superordinate purpose (Fishbach & Ferguson, 2007, Kruglanski, 1995), which can, in turn, improve self-control (Fujita & Carnevale, 2012; Fujita & Han, 2009). So, for example, women who maintained the goal to lose weight were more likely to choose an apple over a candy bar when thinking abstractly, as opposed to concretely (Fujita & Han, 2009). Abstract construal should therefore increase the preference to shift resources from means to goals, because high-level construal disproportionately benefits goals, which are inherently more abstract, relative to means—reinforcing the importance of those goals.

A corollary is that whether the *goal* itself is concrete or abstract should matter, too. For example, people sometimes pursue specific goals (e.g., lose 10 pounds); other times they pursue abstract goals (e.g., be healthy). And past work has found that when goals are specific, individuals pay greater attention to the end state (e.g., the 10 pounds); however, when goals are abstract, they pay disproportionate attention to the initial state (i.e., the status quo; Wallace & Etkin, 2018). Specific goals, in turn, tend to elicit stronger purchase intentions from consumers (Lee & Ariely, 2006; Suher et al., 2019). Relatedly, a fixed sequence of means to achieve a goal can be more motivating for completing goals, but less motivating for *adopting* those goals in the first place (Jin et al., 2013). This is because people sometimes fail to anticipate how those fixed structures can help overcome difficulty during the course of goal pursuit (Huang et al., 2017). These findings collectively suggest that the more abstract a goal is, the "higher up" the hierarchy it will be positioned, thus placing more vertical distance between it and associated means, resulting in a magnification of the preference to pay more for goals than for means.

4. The Interconnected Self

Goals are often pursued in the presence of others (Converse, 2022), with various consequences for motivation. For example, a large literature has shown how and why the presence of similar others can both enhance the accessibility of related goals (Aarts et al., 2004; Fitzsimons & Finkel, 2010; Fitzsimons & Shah, 2008; Shah, 2003; Wills, 1981; Wood et al., 1985) and sometimes hurt motivation (Gardner et al., 2002; Huang, 2018; Lockwood & Kunda, 1997). Meanwhile, the mere presence of others can intensify goal pursuit (Shteynberg & Galinsky, 2011), particularly when it serves to validate the goal (Orehek, 2022). Thus, when social context facilitates goal pursuit—boosting motivation for a focal goal—it magnifies the

desire to directly invest resources in goals, triggering a stronger preference to shift resources from means to goals.

People can also impose goals on others. And a rich body of work in psychology has documented the importance of feeling personal control or autonomy over environments and outcomes (Cooper & Fazio, 1984; Taylor & Brown, 1988; Skinner, 1995; Weiner, 1985). Thus, when goals are externally imposed (vs. self-generated), motivation to achieve such goals suffers (Zhang et al., 2011). For example, participants who got to choose which environmental campaign to support volunteered for more hours than participants who were told which environmental campaign to support. Put differently, when the goals are imposed by others, they become means to another need (e.g., pleasing others). Thus, when personal control or autonomy are undermined, the preference to shift resources from means to goals attenuates, because the focal goal has been devalued.

C. Individual Factors

5. Attributions

People sometimes "manufacture" goal progress (e.g., distort memories of past behavior) to license pursuit of a different or conflicting goal (May & Irmak, 2014). For example, consumers with savings goals who nevertheless wished to spend money on an indulgence tended to underestimate the amount previously spent to justify the desired impulse purchase. People also sometimes experience vicarious goal fulfillment (Wilcox et al., 2009), such that the mere presence of a healthy option can (paradoxically) increase choice of an unhealthy option. In these situations, motivation for the focal goal is almost by definition lower (i.e., given that people are conjuring creative workarounds to license disengagement). This implicitly devalues the focal goal, and so the preference to shift resources from means to goals should attenuate.

An extension of this reasoning is that when means are self-diagnostic—whether someone construes a particular action as representative of the type of person they are (Touré-Tillery & Fishbach, 2012, 2015; Touré-Tillery & Light, 2018; Touré-Tillery, 2022)—these actions will matter much more, in which case self-diagnosticity should attenuate WTP for goals, relative to means. This is because people form ideas about themselves (i.e., establish their self-concept) by observing their own behaviors and drawing inferences about themselves, and they are motivated to maintain positive self-concept (Bem, 1972; Bodner & Prelec, 1996; Dhar & Wertenbroch, 2012; Dunning, 2007; Gneezy et al., 2012). In other words, when means reflect identity, they become relatively more important, and thus the preference to shift resources from means to goals attenuates as a result.

People also exhibit counteractive tendencies (Fishbach & Trope, 2005). For example, when at the beginning of goal pursuit, people sometimes exaggerate their progress level to signal higher goal attainability and elicit greater effort (Huang et al., 2012). Or when encountering a temptation, they may intentionally construe it as more harmful to the attainment of a long-term goal than it actually is. Then, these distorted perceptions can help resolve conflict in favor of the protected goal (Zhang et al., 2010). In both cases people seem to be protecting, or shielding (Kopetz et al., 2011) their goals, thereby bolstering their importance, relative to means (resulting in a stronger preference to shifting resources from means to goals).

6. Individual Differences

A number of individual differences should matter, as well. For example, the Persistence–Licensing Response Measure (PLRM; Zemack-Rugar et al., 2019) captures chronic response tendences to goal progress. As noted, in some situations people make progress toward a goal and then balance, switching to pursuit of a different goal; in other situations people make progress

toward a goal and then highlight, continuing pursuit of the same goal (Fishbach & Dhar, 2005; Fishbach et al., 2006). Importantly, these response tendencies—whether people respond to progress with balancing versus highlighting—are stable personal traits, allowing for measurement by the PLRM. Thus, if some people are systematically more likely to balance versus highlight after making progress toward a goal, then they also likely believe those goals are less important (i.e., consequently, they pursue other more important goals). People who chronically balance, therefore, relative to people who chronically highlight, should less reliably shift resources from means to a focal goal, once they have made progress toward that focal goal.

Another relevant individual difference is regulatory focus, which distinguishes between prevent and promotion focus (Higgins, 1997). People who are prevention-focused are more motivated by a desire for security, while those who are promotion-focused are more motivated by a desire for achievement. When people in actions that fit their regulatory orientation, motivation is higher (e.g., when a prevention-focused individual earns an A to feel secure about their goal to pass a course, or when a promotion-focused individual earns an A to feel achievement about their goal to make the honor roll). To that end, past work has documented similar positive effects for WTP. For example, when there is high regulatory fit, consumers express greater purchase intentions (Avnet & Higgins, 2006; Chernev, 2004; Higgins et al., 2003). Additionally, promotion-focused consumers have been shown to prefer hierarchically structured choice sets, while prevention-focused consumers prefer nonhierarchically structured item lists.

Given that the preference for shifting resources from means to goals is driven by the hierarchical structure of goal systems (Kruglanski et al., 2002; Shaddy & Fishbach, 2018), and past work has found that people who are promotion-focused prefer hierarchy, they should

experience greater sensitivity to the motivational impact of vertical distance between goals and means. In other words, a promotion focus should make more salient the hierarchical relationship between goals and means. And since this hierarchical relationship explains the preference to shift resources from means to goals, it should produce a stronger desire for directly investing resources in goals (as opposed to indirectly investing resources in means).

Relatedly, regulatory mode (e.g., locomotion versus assessment; Higgins et al., 2003) should similarly matter. Locomotors tend to care more about movement forward (i.e., progress toward a goal) than about the end result (i.e., the goal itself), suggesting greater relative importance for means, as opposed to goals. Assessors, on the other hand, tend to be more focused on the value of what they are pursuing (i.e., the goal), suggesting greater relative importance for goals. Therefore, locomotion should decrease willingness to shift resources from means to goals, while assessment should increase it.

7. Scarcity and Depletion

Scarcity can take multiple forms (Shah et al., 2015). For example, consumers often experience resource scarcity, whether they lack sufficient money, time, or energy (Shaddy & Shah, 2018, 2021). And people systematically differ according to how they respond to that resource scarcity—some people react by focusing on scarcity-reduction (e.g., acquire more of the scarce resource), while others engage in a control-restoration response (e.g., seek control in other domains; Cannon et al., 2018). This latter response—seeking control in other domains—suggests a devaluation of the focal goal, likely reducing the preference to shift resources from means to goals. This is because devaluation of a focal goal should undermine the desire to directly invest resources in goals.

Meanwhile, cognitive scarcity (i.e., when mental resources are depleted) can hamper self-control in numerous ways (for a review, see Vohs, 2006), because mental resources are required for self-regulation (i.e., dogged pursuit of a single goal to the exclusion of others is effortful; Baumeister & Heatherton, 1996). So, for example, temptations are more difficult to resist during high levels of cognitive depletion (De Ridder et al., 2012; Hoffman et al., 2012; Metcalfe & Mischel, 1999; Shiv & Fedorikhin, 1999). Therefore, to the extent that the availability of mental resources helps people focus on the importance of achieving their goals, cognitive scarcity may reduce willingness to pay for goals, relative to means (i.e., causing them to take their "eye off the ball," so to speak). And increasing the importance of a focal goal should increase the desire to invest resources directly in its attainment (as opposed to investing resources in means).

Resources as Means to Ends

More broadly, resources can be treated as means to ends or ends in and of themselves. To offer a simple example: Money is a resource that can be exchanged for goods and services in the marketplace. People work to earn money, which, as a fiat currency (Walsh, 2017), does not possess any inherent value and cannot be used as anything but a medium of exchange. But these resources are often fungible, meaning that one can be exchanged for another.

Consider that consumers can often "buy time" with money (Whillans et al., 2017). For example, when participants were asked to spend $40 in each of two consecutive weekends and then randomly assigned to spend that money on either a purchase that would save time (e.g., paying for a cleaning service) or a material purchase (e.g., buying new clothes), they reported

being in better moods on weekends during which they spent money to buy time. This effect was mediated by reduced feelings of stress.

Importantly, the framework explicated herein might shed additional light on why exchanging resources in this way yields greater happiness. Recall that when given the opportunity, people systematically prefer to shift resources away from means and toward goals (Shaddy & Fishbach, 2018). This is because when individuals allocate resources across goals and means, they perceive investing resources in goals as a direct investment in goal attainment (i.e., higher in the goal hierarchy). Meanwhile, they perceive investing resources in means an indirect investment in goal attainment (i.e., lower in the goal hierarchy).

People also often experience time scarcity (i.e., feeling as though one does not have enough time; Godbey, et al., 1998; Zuzanek et al., 1998), suggesting that acquiring more time might be, for some, construed as a goal in and of itself (because it is inherently valuable), unlike acquiring more money (which is not inherently valuable). Thus, by spending money (a means) to acquire time (a goal), individuals effectively shift resources from means to goals—nudging the action higher up the goal hierarchy. And indeed, greater monetary wealth confers greater autonomy over how individuals choose to spend their time (Gallo & Matthews, 2003; Kraus et al., 2012). No wonder that having more time is associated with greater happiness (Kasser & Sheldon, 2009). More broadly, what this reasoning potentially suggests is the possibility that viewing *any* resource as a goal, as opposed to a means, can increase the subjective value of that resource. Perhaps this is part of the reason why even millionaires wish they had more money—especially when being wealthy is socially valuable (Kruglanski et al., 2014, 2021)—and those who earned their wealth (i.e., pursued its accumulation as a goal, in and of itself) tend to be happier than those who inherited it (Donnelly et al., 2018).

Conclusion

This chapter explained how the architecture of goal systems systematically shapes judgment and decision making with respect to the allocation of scarce resources—specifically, by discussing goal systems theory (GST) in light of consumer behavior research. This is a broadly important topic, given that consumers frequently incur costs associated with goals and costs associated with means. For example, shoppers at big-box warehouse clubs need to pay money for both membership (invest in means) and goods (invest in goals). To that end, this chapter offered an overview of recent work documenting how and why people systematically prefer shifting resources (e.g., time, money, effort) from means to goals (even holding total resource allocation and goal attainment constant), discussed implications for pricing, proposed a set of moderating variables, and suggested fruitful directions for future research.

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