

# Temporal focus: Thinking about the past, present, and future

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We review recent findings on temporal focus — the degree to which individuals think about the past, present, and/or future. Hypothetically, focusing on each time period could be beneficial as one can learn from the past, savor the present moment, and plan for the future. Yet research demonstrates that characteristically thinking about the past is disadvantageous, thinking about the future is advantageous, and thinking about the present has mixed outcomes. This paper examines these findings to consider where individuals should focus their attention in time, highlighting established (e.g., country level differences) and emerging (e.g., temporal focus profiles) research on the topic.

## Addresses

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Albert Einstein wrote that the distinction between the past, present, and future is ‘a stubbornly persistent illusion.’ This illusion, however, pervades human life as people ‘mentally time travel’ [1] from the present moment to past encounters and future possibilities. The concept of temporal focus — people’s tendency to characteristically think about the different periods of their lives — has grown in importance over the past few decades, pointing to a fundamental question: should people focus on the past, the present, and/or the future? We tackle this question by concisely reviewing the current state of knowledge. After summarizing research on the conceptualization of temporal focus, we examine the latest research and discuss emerging trends.

## What is temporal focus?

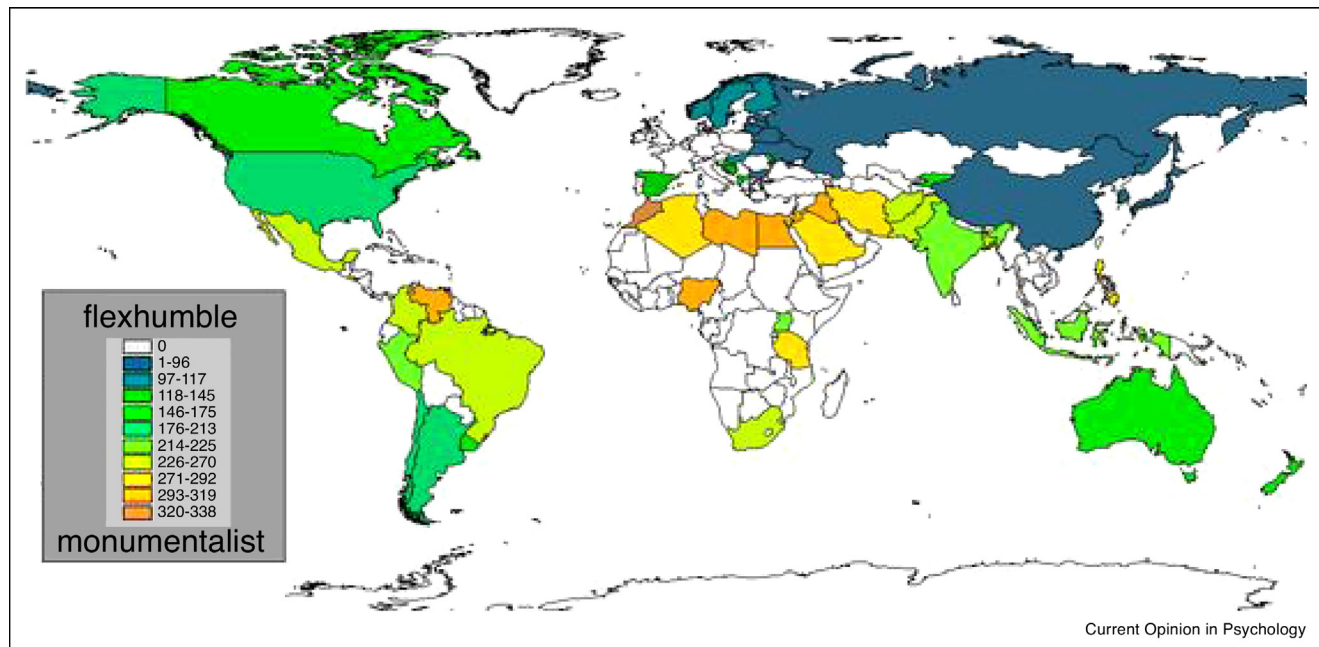
Temporal focus is the extent to which individuals characteristically direct their attention to the past, present, and/or future [2<sup>••</sup>,3,4<sup>••</sup>,5<sup>••</sup>].<sup>3</sup> To varying degrees, individuals live in the moment, dwell on the past, or dream of the future. The concept of temporal focus originated in early work by James [6], Murray [7], and Lewin [8,9] who discussed individuals’ tendency to revisit the past and forecast the future. In fact, Lewin [9] postulated that individuals could be understood only in light of their overarching ‘time perspective,’ which reflects people’s views of the totality of time. Subsequent work has characterized this broad time perspective like a temporal personality [10], which subsumes concepts such as time attitude, polychronicity, and temporal focus, among others. Thus, temporal focus is but one element of the many temporal characteristics of individuals.

The relatively stable tendency to think about the past, present, and future derives from socialization in early childhood [11–13]. In one’s youth, parents, teachers, and classmates shape temporal attention by establishing what constitutes a proper focus [14–16]. For example, punitive parenting engenders a present focus, potentially leading to delinquency [17], whereas parenting that meets children’s needs and encourages delay of gratification encourages a future focus [18,19]. This primary socialization also occurs through the influence of national culture [12,13,20–23]. As Hofstede’s map shows in [Figure 1](#), countries vary greatly in their emphasis on the present (i.e., short-term) versus the future (i.e., long-term). Country-level temporal focus trickles down to individuals in various ways. For instance, because Chinese culture prioritizes its long history and traditions of respecting ancestors, its citizens focus generally more on the past than North Americans who have a much shorter national history [24]. Similarly, Pérez and Tavits [25] suggest that a country’s language shapes its citizens’ temporal focus depending on the language’s use of past or future tense. In this issue, Chen and Boroditsky [26] further elaborate on how national languages can cultivate future-oriented behaviors, such as saving.

Despite the stable aspect of temporal focus that creates between-person differences, within-person change also can occur [27]. Such fluctuation can be due to aging, significant life events, or the consideration of state

<sup>3</sup> We follow the traditions of Bluedorn [2<sup>••</sup>] and Shipp *et al.* [4<sup>••</sup>] who suggest that the term ‘temporal focus’ better describes focus of attention to various time periods in contrast to other terms such as time perspective or temporal orientation.

Figure 1



Global temporal focus as measured by Hofstede's Work Values Scale. Note: Adapted from Hofstede's Dimension Map for Long-term Orientation [88\*]. 'Flexhumble' represents a country with a stronger future temporal focus (i.e., long-term orientation) whereas 'Monumentalist' represents a stronger current temporal focus (i.e., short-term orientation). White colored areas represent countries with no data on this dimension.

temporal focus. First, temporal focus shifts as people age, moving into different life stages [28]. As people move from adolescence into adulthood, they increase their attention to the past and future and decrease their attention to the present [29\*], as shown in Figure 2. However, as people get much older, they perceive that time is limited and focus less on the future [30–32]. In addition, significant events can alter temporal focus when values and priorities are questioned. For example, the 9/11 terrorist attacks created initial changes in a stronger present focus [33] and a stronger past focus that persisted a year later [34].

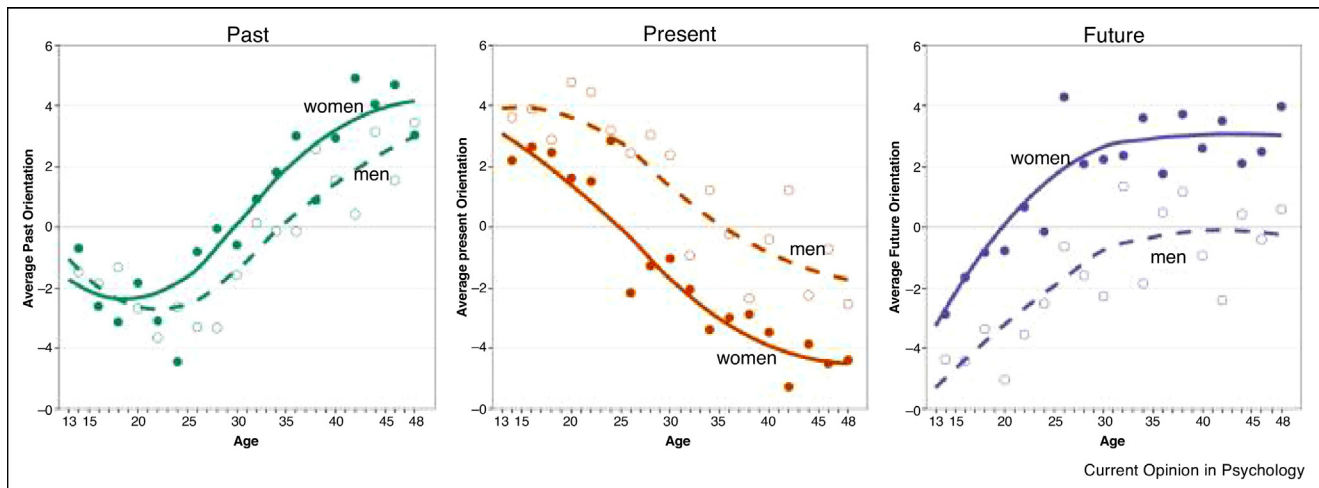
Both aging and life events influence temporal focus in an enduring way, yet a third way that within-person change occurs is more fleeting. Temporal focus can be considered more as a state, with attention to the past, present, and future at a moment in time. Daily within-person variance ranges from 63 to 69% across the time periods [35\*], suggesting that momentary attention shifts substantially in response to daily cues. Further, fluctuation has been manipulated in the lab when attention to one or more time periods is primed [36–38]. These findings demonstrate that although individuals have a characteristic tendency to focus on certain time periods, momentary attention may be directed to a time period based on current cues.

### What is the impact of temporal focus?

To date, each temporal focus dimension has strongly impacted many attitudinal and behavioral outcomes. Research demonstrates that past-focused individuals experience lower well-being, especially depression and dissatisfaction with life [4\*\*,5\*\*,35\*,39–41,42\*]. Particularly when measured by the past-negative dimension of the Zimbardo Time Perspective Inventory (ZTPI),<sup>4</sup> greater past focus also leads people to engage in harmful behaviors such as internet addiction [43] and the expectation of negative affect [44], which translates into greater distress and worry [45]. Further, past focus relates positively to neuroticism and trait anxiety [4\*\*,5\*\*,46], and negatively to self-esteem [47], core self-evaluations [46], and mindfulness [39,40]. Beyond main effects, past temporal focus also strengthens the effect of past job characteristics on work outcomes. Shipp *et al.*'s [4\*\*] study 4 (see Figure 3, Panel A) shows that when past pay is higher, past-focused individuals are more likely to consider quitting their *current* job as they focus more on the temporal comparison. Overall, these findings suggest that

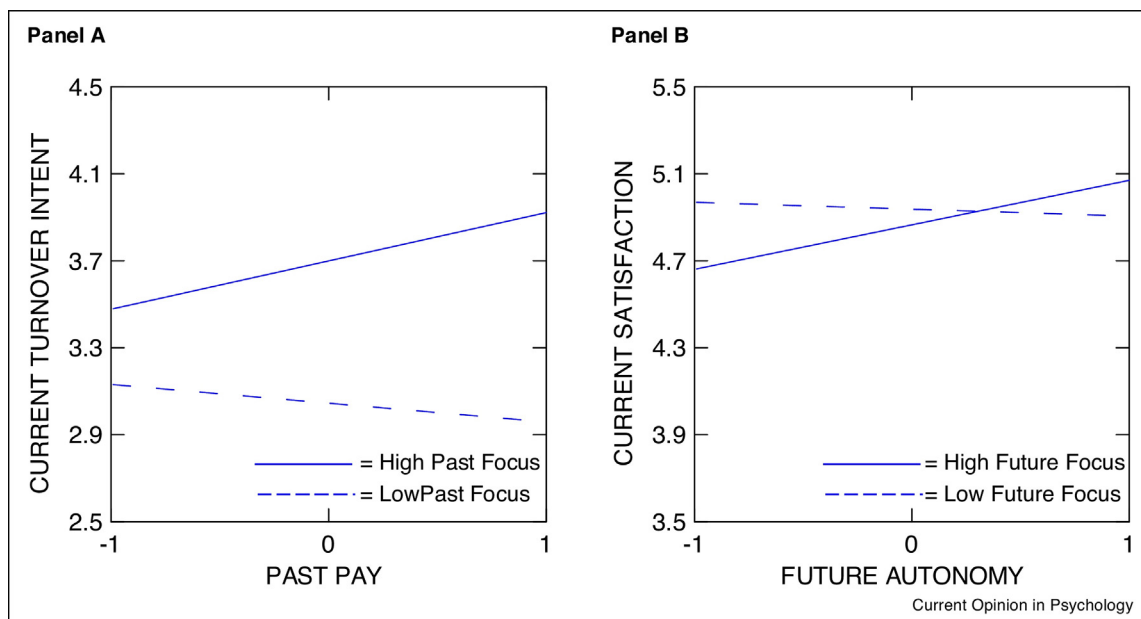
<sup>4</sup> Although we note differences where applicable, we include findings using various measures of temporal focus, including the Zimbardo Time Perspective Inventory (ZTPI; Zimbardo and Boyd, [5\*\*]) and the Temporal Focus Scale (Shipp *et al.* [4\*\*]), among others.

Figure 2



Average temporal focus levels for women and men ages 13–48. *Note:* Reprinted from Park *et al.* [29], Figure 1. Solid lines represent women whereas dashed lines represent men.

Figure 3



Temporal focus changes the impact of past and future job characteristics. *Note:* Reprinted from Shipp *et al.* [4\*\*] Figures 1 and 3. Solid lines represent high focus on past (Panel A) or future (Panel B) whereas dashed lines represent low past or future focus.

a higher past focus may be maladaptive, causing various types of emotional distress.

By contrast, some studies show that current temporal focus can increase well-being. Several studies show that present-focused individuals enjoy higher life satisfaction [4\*\*,35,48] and core self-evaluations [46]. However, other findings are not as positive. For example, the present

hedonism and present fatalism factors of the ZTPI correlate with depression and lower mindfulness [39], which is interesting given that mindfulness focuses attention on the present moment. Such findings could result from the specific measure of temporal focus (i.e., ZTPI) rather than the theoretical relationship between mindfulness and temporal focus, suggesting that more research is needed [49\*\*]. Beyond well-being, present-focused individuals

tend to be more aggressive [50], risk-seeking [4<sup>••</sup>, 5<sup>••</sup>, 51<sup>•</sup>], and engage in drug and alcohol use [52<sup>•</sup>, 53]. Further, they tend to procrastinate, acting in response to situations rather than proactively [54–56]. And although they report a stronger desire to synchronize their work with colleagues, they actually exhibit fewer synchronizing behaviors [57]. Taken together, these discoveries suggest that current temporal focus creates somewhat of a ‘catch-22’ [49<sup>••</sup>]. Although focusing on the present moment may be satisfying to some extent, it may lead to detrimental behaviors that put individuals at risk in terms of emotional, physical, and work outcomes.

Compared to past and current temporal focus, future temporal focus seems less related to well-being [4<sup>••</sup>, 5<sup>••</sup>, 35<sup>•</sup>]. Thinking about the future is an abstract activity that includes fewer details than the present or past [58]. Because the future is unknown, cognitive reactions may outweigh affective ones, such as how highly future focused individuals react differently to their current jobs based on attention to future job characteristics (4<sup>••</sup>); see Figure 3, Panel B). Given their predilection to think through events, future-focused individuals are more likely to set goals and act proactively and less likely to procrastinate [54, 55, 59, 60]. They care more about their health [61, 62], environmental issues [63, 64], volunteering [38], prosocial behaviors [65, 66], academic performance [5<sup>••</sup>], and careers [46, 67]. Their forecasting and planning skills likely account for future-focused individuals’ responsible financial behavior [68], which ultimately affords them higher socioeconomic status [5<sup>••</sup>, 69]. In sum, although future temporal focus seems less related to well-being, it affects many important life and work outcomes and seems especially important for achievement in both domains.

### The future of temporal focus

Beyond the findings we just reviewed, we also note three interesting developments that are emerging. First, research increasingly investigates temporal focus beyond the individual level using different methods. Recent research spans many levels, including dyads [70], teams [71], and countries [25]. In addition, we also note that access to ‘big data’ offers a potentially unobtrusive way to study temporal focus at these different levels by coding available data rather than surveying participants [29<sup>•</sup>, 72, 73]. We look forward to new multilevel models of temporal focus that examine cross-level linkages using innovative datasets and measures.

A second development is that researchers have begun to investigate how people mentally represent temporal focus, particularly the *spatial* location of different time periods [74]. For instance, Moroccans locate the future ‘behind’ and the past ‘in front,’ while Spaniards locate the future ahead and the past behind [75]. The authors explain that people place ‘ahead of them’ their dominant

temporal focus. Another experiment found that when standing, people who think about the future move forward whereas people who think about the past move backward, further highlighting how people spatially represent temporal foci in their minds [76]. Such findings are important given other research on the importance of narratives comprised of past, present, and future experiences that help individuals make sense of the current moment [77, 78].

Finally, both Zimbardo and Boyd [5<sup>••</sup>] and Shipp *et al.* [4<sup>••</sup>] suggested that temporal focus may act as a profile that can be balanced or unbalanced. Early evidence looks promising in this regard [79–81]. For example, in Japan, four profiles emerged: past focused, current/future focused, multi-focused, and no focus, with the no focus profile producing the lowest self-esteem [82]. Additional research on ‘balanced time perspective’ [83, 84] or the ‘deviation from balanced time perspective’ [85, 86] offer different approaches to calculate how much individuals differ in their attention to the different time periods. Although more research is needed, preliminary results support Boniwell and Zimbardo’s [87] prediction that a stronger balance among the past, present, and future leads to greater well-being, which can offer practical conclusions that help individuals direct their thoughts to the most beneficial time periods.

### Conclusion

Despite individuals characteristically thinking about the past, present, and future to varying degrees, our review demonstrates that thinking about the future may be the most beneficial to life and work outcomes. At first glance, the key takeaway may be to focus mostly on the future, downplaying the past and only thinking about the present as needed to enact one’s future plans. Yet emerging work on temporal focus profiles indicates that such a conclusion may be premature. A better approach may be to generally think about the future but flexibly shift one’s attention across all three time periods based on the context (e.g., different cultural context or a specific situation). We look forward to seeing future developments in this important stream of research.

### Conflict of interest statement

Nothing declared.

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- of special interest
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Hofstede's pioneering research shows that national cultures vary dramatically in their temporal focus, with average national scores falling somewhere between short-term and long-term orientation. Research building on Hofstede's model reveals the dramatic impact of national temporal focus on outcomes such as economic development and attitudes toward environmental policy.