

RATIONALE

- Flow (Csikszentmihalyi et al., 2005) is the phenomenological experience accompanying the complete absorption in an activity, which can engender engagement in the activity for its own sake. As such, Flow is argued to be an important resource for developing and maintaining agency in the striving for mastery.
- Socioemotional Selectivity Theory (SST) assumes
 - A foreshortened future time perspective (FTP) with age leads to the selection of social-emotional experiences rather than instrumental or information-acquisition activities that are preparatory in nature (Carstensen, 2006).
 - An age-related shift in values from individual achievement to shared societal well-being (Freund & Ritter, 2014).
- Together, these theories suggest that
 - Flow will be heightened for behaviors engaged for agentic motives relative to those engaged for social motives.
 - This agentic Flow advantage (AFA) will decrease with age.
 - The Flow experience will be relatively enhanced among older adults for activities engaged for a social purpose and in a social context.
- Based on data from an online sample of young and middle-aged adults, Worm and Stine-Morrow (2018) found evidence that AFA decreases with age. In this study, we examined this phenomenon later into the lifespan, with the addition of a community-based sample of older adults.

METHOD

- Participants were recruited through MTurk (O1) and from the community (O2) (Table 1).
- They were first asked to recollect four activities varying in purpose and context (Table 2).
- Using the Flow State Scale (Payne et al., 2011; cf. Table 3), participants then rated their Flow experience during these four activities.
- They also completed scales measuring Future Time Perspective (FTP; Carstensen, 2006), and individualistic vs. collectivistic values (Triandis & Gelfand, 1998).

Table 1 Participant Characteristics

	Y	YM	MA	O1	O2	O
	(18-29)	(30-40)	(41-60)	(61-65)	(61-84)	(61-84)
Age						
<i>N</i>	239	270	174	27	60	87
<i>M</i>	25.29	34.05	49.06	63.26	70.93	68.52
<i>SD</i>	2.83	3.02	5.72	1.53	5.22	5.67
Years of Education						
<i>M</i>	14.92	15.66	15.03	14.78	15.32	15.13
<i>SD</i>	2.01	2.03	2.27	2.81	2.27	2.47
Future Time Perspective						
<i>Mean</i>	4.72	4.68	4.28	4.22	3.83	3.94
<i>SD</i>	0.86	1.01	1.08	1.02	1.06	1.05

Do Age-Related Differences in Future Time Perspective or Values Influence the Flow Experience?

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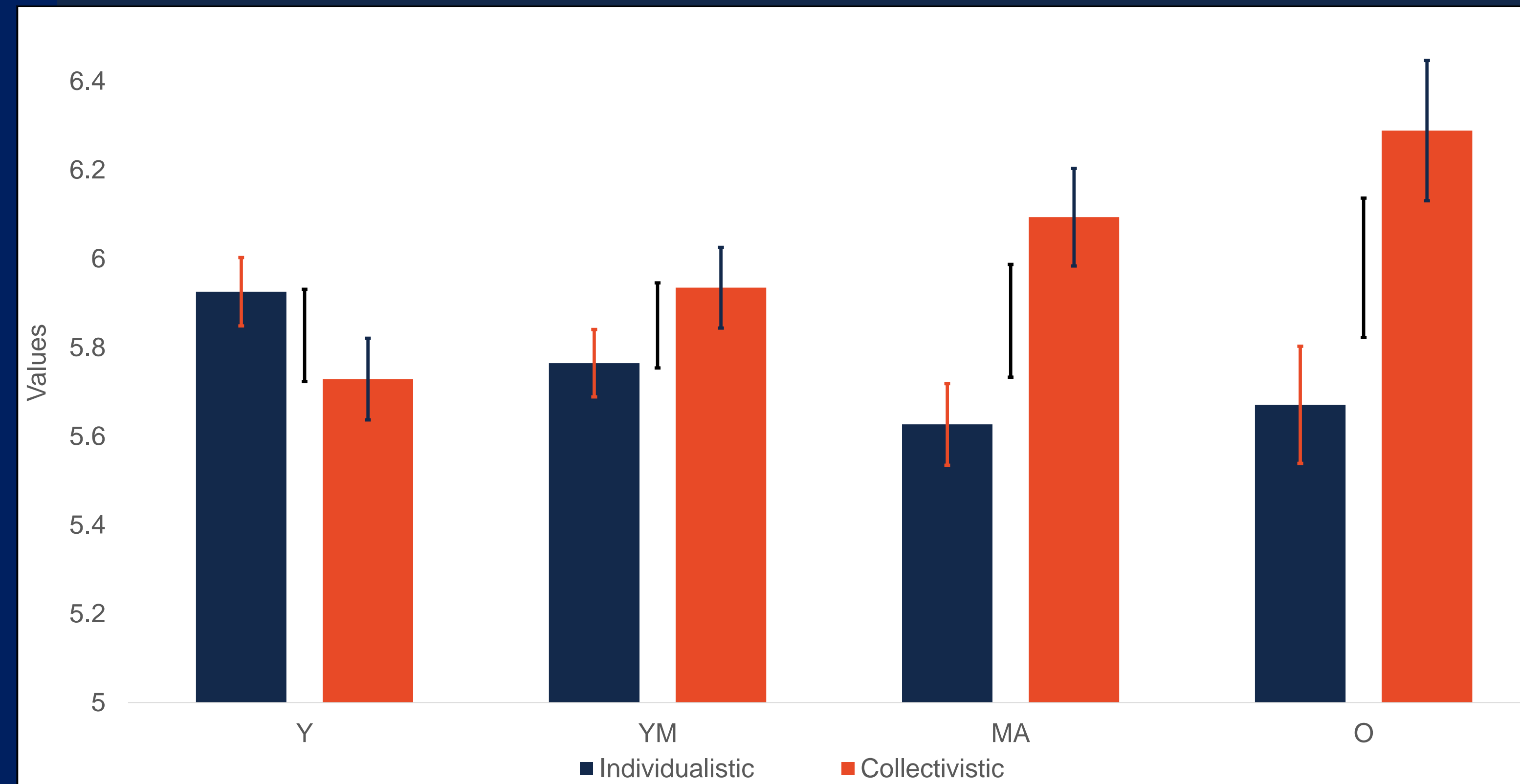


Figure 1. Mean levels of Values as a function of Age across all samples (error bars are plotted for means and within-subject differences).

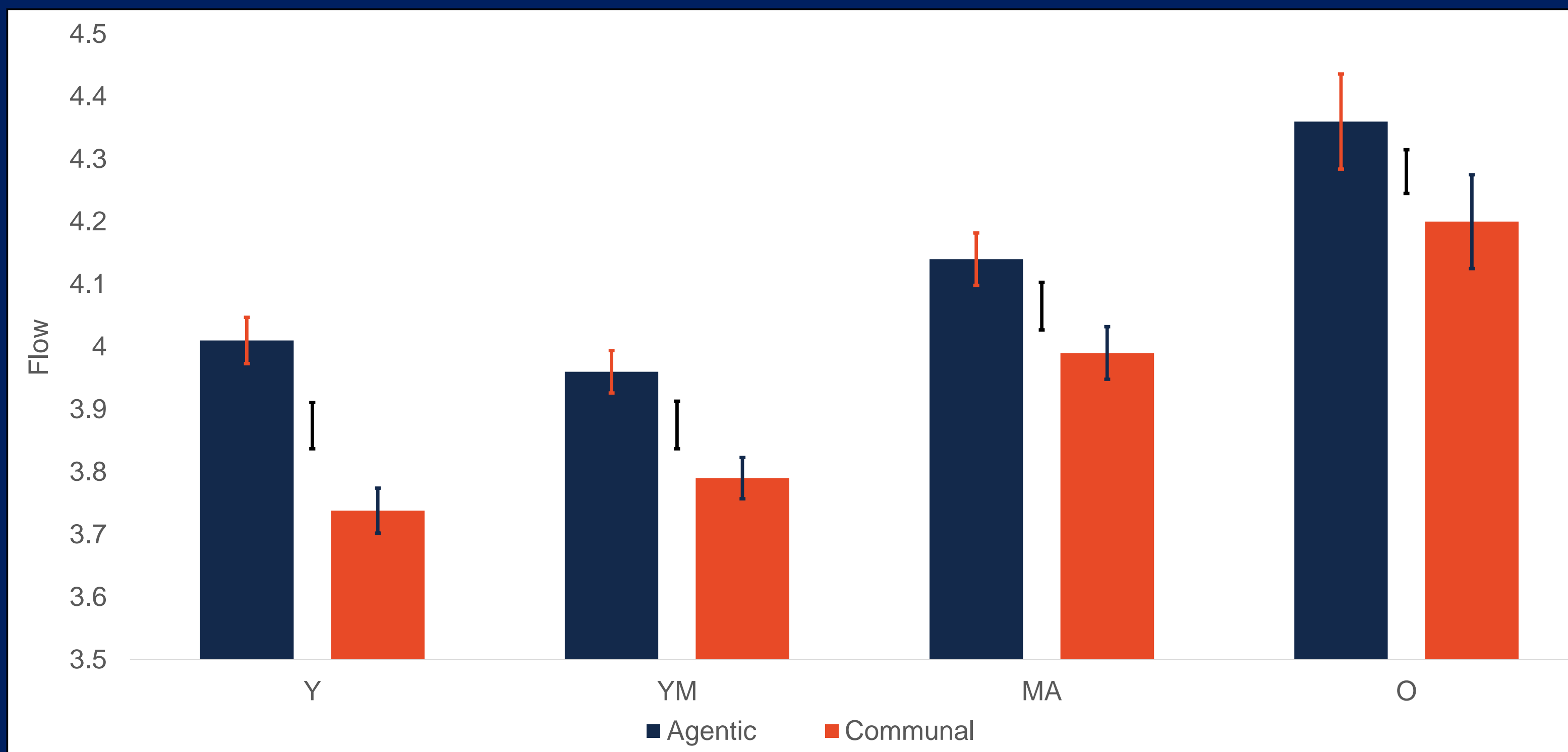


Figure 2. Mean levels of Flow as a function of Purpose and Age across all samples (error bars are plotted for means and within-subject differences).

RESULTS

- Consistent with SST, FTP decreased with age (Table 1), $F(3,760) = 17.5, p < .01$, and the endorsement of collectivistic values increased with age relative to individualistic values (Fig 1), $F(3,472)=6.3, p < .01$.
- The intensity of the Flow experience increased with age (Fig 2), $F(3,766)=21.6, p < .01$, with $Y=YM < M < O$ (based on post-hoc t-tests).
- Flow was greater for agentic compared to communal activities, $F(1,761) = 56.2, p < .01$.
- The difference in Flow between agentic and communal activities decreased with age (Fig 2), comparing Y, YM, MA, $F(2,763) = 3.4, p = .03$, with four age groups, $F(3,761) = 2.4, p = .07$.
- Flow was not differentially enhanced with age by a social context, $F(3,761) < 1$.
- To investigate the mechanisms underlying the decrease in the Agentic Flow Advantage (AFA = (AF-CF)/CF) with age, we examined its relationship with FTP and the relatively stronger endorsement of collectivistic over individualistic values, or Collectivistic Dominance (CD = (Col - Ind)/Ind).
- AFA, which was negatively correlated with age, $r(770) = -.12, p < .01$, was inversely related to CD, $r(477) = -.14, p < .01$, but did not correlate with FTP, $r(764) = .002, p = .957$. Both age, $\beta = -.109, t(475) = -2.32, p = .021$, and CD, $\beta = -.107, t(475) = -2.30, p = .022$, independently decreased AFA. However, the age-related increase in CD did not significantly mediate the age difference in the AFA ($b = -.0002, 95\% \text{ CI} = -.0006, .0000$).

CONCLUSIONS

- Consistent with the idea that Flow promotes mastery, Flow was greater among those with a sense of an expansive temporal horizon, and heightened for behaviors with agentic motives, an agentic flow advantage.
- Consistent with SST
 - The importance of values for self-transcendence (collectivism) increased with age while those self-enhancement (individualism) decreased.
 - Both aging and collectivistic values independently decreased the agentic flow advantage. Surprisingly, the age-related foreshortening of the temporal horizon (as measured by FTP) did not impact the Flow experience.
- Given the possible importance of the Flow experience for engendering cognitive growth, the preserved striving for mastery with age is an important resource.
- Future research could explore how the influence of social motives on Flow varies with the properties of the social network that provide a context for these social motives (e.g., cooking for a close family member; cooking for strangers at a volunteer event).

Table 2 Example Activities

	Individual (Alone)	Social (With Others)
Agentic (For Yourself)	Reading, training for a marathon	Going to a gym class or the movies
Communal (For Others)	Cooking, volunteering (river clean up)	Teaching, planning a birthday party

Table 3 Flow State Scale (Payne et. al., 2011)

Flow Dimension	Example Item
Challenge-Skill Balance	I felt competent in meeting the demands of the situation.
Clear Goals	I clearly knew what I wanted to do.
Concentration	My attention was totally focused on what I was doing.
Control	I felt like I could control my attention.
Time	I lost my awareness of time.
Merging Action and Autotelic Experience	Once I got started, I performed the activity automatically. The experience was extremely rewarding.

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