

# **Can One Cook Spoil the Broth? The Effects of Minimum Pacing Style in Student Chef Teams**

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*Can an entire team be held back by one team member with the lowest pacing style? This question has been unexplored because most team composition research focuses on average levels within a team and because pacing style is a relative newcomer to the temporal individual difference literature. We examined the effects of teams' minimum pacing style (how effort is allocated over time to meet deadlines) member in student chef teams. Members with the lowest pacing style acted as weak links in their teams, reducing both team creativity and timeliness. Study findings show promise for continued investigation of the compositional effects of minimum pacing style on team outcomes and temporal leadership (leader behaviors that coordinate the pace of task accomplishment in teams) as an intervention to attenuate the negative effects of the weakest link member.*

*Keywords: pacing styles, teams, temporal leadership, creativity, timeliness, conjunctive tasks*

## **INTRODUCTION**

When working toward a deadline, individuals differ in their pacing style: how effort is allocated over time to meet deadlines (Gevers, Mohammed, & Baytalskaya, 2015). Some people space their work evenly throughout the allotted time, whereas others wait until the last minute to start tasks. Other individuals start projects early, taper off in the middle, and pick up the pace again closer to the deadline (Gevers, Claessens, van Eerde, & Rutte, 2009). What happens when members with different pacing styles work interdependently in a team? Emerging research demonstrates that pacing style diversity has important implications for team outcomes such as collaboration (Gevers, Rispens, & Li, 2016) and performance (Gevers et al., 2009; Mohammed & Nadkarni, 2011). However, pacing style research is nascent, and many questions remain regarding the impact of differing pacing styles in a team (Gevers et al., 2015).

Can an entire team be held back by one team member least inclined to use a specific pacing style, meaning the lowest pacing style score in the team? If so, can leaders help prevent the negative effects of the “weakest link” member? The purpose of this study was to examine the effects of teams' minimum

pace member on team timeliness and creativity, as moderated by temporal leadership (leader behaviors that help coordinate the pace of task accomplishment in teams; Mohammed & Nadkarni, 2011). We examined these relationships on a sample of student chef teams in a culinary training institution.

This study builds on prior team composition research in three key ways. First, although most team composition studies utilize the average or variation within the team to represent team characteristics (Mathieu, Tannenbaum, Donsbach, & Alliger, 2014), we explore whether the lowest scoring member may represent the whole group. Whereas prior studies have largely assumed that all members should be weighted equally, “given the nature of the task interdependencies, particular individuals can carry or undermine the entire team effort” (Mathieu et al., 2014, p. 141). Although less frequently investigated, the impact of these “weakest link” members may be associated with team performance to the same degree as the group mean (Bell, 2007). Therefore, a recent review of team composition research (Mathieu et al., 2014) argues that more attention be given to models in which a single individual exerts a disproportionate influence in teams. For example, a team of rock climbers all connected via a climbing rope can only move up the mountain at the pace of the slowest climber (Steiner, 1972). Kitchen production teams are an ideal setting to investigate minimum models since the slowest paced member may negatively affect timely meal execution.

Second, pacing style is one of the newest and least researched of time-related characteristics (Mohammed & Harrison, 2013), but has shown promising implications for team outcomes (Gevers et al., 2016; Mohammed & Nadkarni, 2011). We focus on the least studied of the pacing styles, the U-shaped style. The U-shaped style involves starting tasks at the beginning, reducing effort in the middle, and exerting effort again closer to the deadline (Gevers et al., 2015). The U-shaped style mirrors the creative process requiring periods of task engagement and disengagement or incubation (Van Eerde, Beeftink, & Rutte, 2016). Building on qualitative findings (e.g., Van Eerde et al., 2016), we quantitatively examine the effects of U-shaped pacing style on creative performance and timeliness in a culinary context requiring creativity.

Third, the present study investigates the conditions under which minimum U-shaped style influences team outcomes by examining the moderating influence of temporal leadership. Temporal leadership provides guidance toward aligning time-based expectations across team members (e.g., Maruping, Venkatesh, Thatcher, & Patel, 2015), including reminding members of deadlines, building in extra time to handle emerging problems, urging members to complete subtasks on time, and coordinating the team to meet deadlines (Mohammed & Nadkarni, 2011). Thus, the potential negative effects of the “weakest link” member may be offset by team leaders who attend to time-related aspects of task performance.

## **THEORETICAL BACKGROUND**

### **Pacing Style**

As a relative newcomer to the temporal individual difference literature, pacing style reflects the distribution of effort over time in working toward deadlines (Gevers et al., 2015). Specific examples include deadline style (wait to begin task activities until close to the deadline and actively work up until the cutoff), steady style (spread effort out evenly from task commencement to the deadline, such as working an hour per day until the due date), and U-shaped style (allocate more effort at the beginning and end of the task with less activity in the middle) (Gevers et al., 2015; Gevers et al., 2016; Gevers & Demerouti, 2013). At the individual-level, findings support pacing style’s influence on planning, self-efficacy, and job performance (Claessens, 2004).

U-shaped pacing style is of particular interest because it 1) is a hybrid style that combines early and deadline workers, 2) has received the least empirical research attention to date and 3) has special relevance for creative contexts (Claessens, 2004; Van Eerde et al., 2016). Specifically, interviews with architects revealed that a U-shaped pacing style was utilized over deadline or steady styles (Claessens, 2004). Building on and expanding this qualitative work, we quantitatively examined the effects of U-shaped minimum scores in a culinary training context in which creativity is a critical facet of successful team performance.

## **The Importance of Creativity in the Kitchen**

Chef creativity is an agreed upon key to successful cuisine (Aron, Botella, & Lubart, 2019; Stierand, 2015). For example, artistic creativity is involved in the selection and development of courses throughout the meal (Bouty & Gomez, 2015). In addition, functional creativity is required when chefs must adapt meals to specific customer needs (e.g., allergies) and/or improvise substitutions to address a sudden influx of diners when ingredients run low (Bouty & Gomez, 2015). In our sample of student chef teams, creativity was a key performance indicator in mystery basket challenges in which students had to produce a coherent dish from disconnected and avantgarde ingredients. Due to the task demands regarding creativity, we explicitly examine team creativity as an outcome of interest.

## **The Relevance of Minimum U-Shaped Pacing Style in a Culinary Setting**

Assuming that all members' pacing styles should be weighted equally, previous research has focused on the average level where weak and strong members are expected to balance each other out (Gevers et al. 2009) or variance which assesses heterogeneity (Mohammed, Alipour, Martinez, & Livert, 2017). However, team members with the weakest pacing styles could disproportionately impact team dynamics for complex tasks requiring a high level of interdependence, thus attenuating performance. The minimum score on a variable would best represent the team in contexts where the overall team performance depends heavily on the least proficient member (Bell, 2007), termed a conjunctive task (Steiner, 1972). For example, the slowest person can become a bottleneck during sequential tasks when one member must act before another person can complete their work (Valcea, Hamdani, & Bradley, 2019).

Cooks often divide responsibilities (e.g., mixing, frying, sautéing, grilling) so that multiple components are prepared concurrently, but kitchen teams must carefully synchronize the timing to ensure that dish components are completed together for plating and service (Fine, 2008). Therefore, kitchen teams can only fulfill orders as fast as the slowest teammate can prepare his/her component (Fine, 2008). Due to the conjunctive nature of this work in which quality and timeliness can be jeopardized by the weakest link teammate (Mathieu et al., 2014), we therefore conceptualized team U-shaped pacing style as the minimum score.

## **HYPOTHESES**

### **Effects of Minimum U-Shaped Pacing Style on Team Outcomes**

#### *Effects of Minimum U-Shaped Pacing Style on Team Creativity*

Individuals working in creative contexts benefit from a process in which they 1) prepare by gaining knowledge and generating ideas about a problem, 2) incubate by taking time away from the task to allow spontaneous, creative ideas to formulate, and 3) implement the solution (Segal, 2004; Van Eerde et al., 2016). The pause during the incubation period helps to overcome impasses and permits "eureka" moments to suddenly emerge, thereby helping creative performance (e.g., Segal, 2004).

Interestingly, the stages of the creative process nicely parallel the U-shaped pacing style in which individuals 1) allocate initial effort, 2) pause from the task during the midpoint to allow consideration of ideas and plans, and 3) resume effort for final task execution (Van Eerde et al., 2016). Indeed, Van Eerde and colleagues (2016) found that architects and other creative professionals such as designers and writers followed a U-shaped pacing pattern in their creative projects more than individuals in less creative professions.

Because the U-shaped style parallels the recommended stages of the creative process, we expected that student chef teams responsible for weekly menu planning and production would gain from exerting initial effort to plan mystery basket challenges and prepare to gather ingredients and appliances at the beginning of the assignment, allow for incubation to foster spontaneous idea formulation during the week, and then apply effort when cooking and serving the meals at the end of the week during meal preparation. As such, we hypothesized that the lowest scoring U-shaped pacing style member would lower creativity in student chef teams. By not adhering to a pacing style found to be facilitative of novel and useful ideas (Van Eerde

et al., 2016), the weakest link U-shaped member in the team would make it less likely that the chef team would produce a meal rated as creative.

***Hypothesis 1: Minimum U-shaped pacing style positively predicts team creativity.***

#### *Effects of Minimum U-Shaped Pacing Style on Timeliness*

In addition to creativity, timeliness is also a key principle for chef teams, representing a major source of stress (Murray-Gibbons & Gibbons, 2007). Indeed, food production and plating are inseparable from timeliness because cooking and baking require discrete amounts of time, little of which is flexible (Maguire & Howard, 2001). Moreover, the various components of each dish require temporal coordination and sequencing (e.g., Beef generally takes longer to cook than chicken, which takes longer to prepare than vegetables).

Given the effectiveness of a U-shaped pacing style in this context, the performance deficiencies generated by a team member with a very low U-shaped pacing style are likely to hold back the progress of the entire team. Because kitchen team members must be ready to plate and serve dish components at the same time, delays from the least U-shaped pacing style member would slow meal execution for the whole team, regardless of the U-shaped pacing styles of other members. Thus, the weakest U-shaped member is likely to act as a meal plating bottleneck, jeopardizing the service timeliness of the entire chef team.

***Hypothesis 2: Minimum U-shaped pacing style positively predicts team timeliness.***

### **The Moderating Effect of Temporal Leadership**

#### *Temporal Leadership*

In response to the criticism that leadership is largely treated as atemporal in research (Shamir, 2011), the construct of team temporal leadership was introduced to draw attention to the temporal behaviors of leaders (Mohammed & Nadkarni, 2011).

Specifically, team temporal leadership captures supervision regarding time management behaviors, including “scheduling (e.g., reminding team members of deadlines, setting interim milestones), synchronizing (e.g., coordinating the team so that work is finished on time), and allocating temporal resources (e.g., building in time for contingencies and problems)” (Mohammed & Nadkarni, 2011, p. 492). Several studies have demonstrated that team temporal leadership is associated with increased team performance (Mohammed & Nadkarni, 2011; Maruping et al., 2015; Santos, Passos, Uitdewilligen, & Nübold, 2016; Yuan & Lo, 2018). Given these promising findings, we explored team temporal leadership as a moderator of the effect of U-shaped pacing style minimum - “the weakest link” - on timeliness.

Because the temporal leadership literature does not suggest particular benefits for team creativity, we did not hypothesize a moderating effect on minimum U-shaped pacing style and team creativity.

#### *Effects of Temporal Leadership on the Minimum U-Shaped Pacing Style -Timeliness Relationship*

By providing temporal guidance and structure to regulate and adjust individual pacing styles (Mohammed & Nadkarni, 2011), we predict that strong team temporal leadership will play a key role in mitigating the performance deficiencies arising from the weakest link U-shaped member in the team. Leader behaviors including reminding members of deadlines, enforcing schedules, and synchronizing member behaviors to meet deadlines (Maruping et al., 2015) may prevent the least U-shaped pacing style member from slowing team meal execution. Furthermore, when leaders dynamically allocate temporal resources and build in contingency time for unexpected problems (Mohammed & Nadkarni, 2011), there is a greater probability that the minimum U-shaped member will not derail team timeliness. In contrast, without strong temporal leadership that coordinates the team so work is finished on time, it is likely that the lowest U-shaped pacing style member will act as a bottleneck regarding meal design, plating and service, lowering team timeliness.

**Hypothesis 3:** *Temporal leadership moderates the relationship between minimum U-shaped pacing style and team timeliness, such that the relationship is more positive when temporal leadership is stronger.*

## **METHODS**

### **Sample and Team Task**

The sample consisted of 162 undergraduates at a leading culinary institution enrolled in a 10-week advanced baking or cooking class that met for 6.5 hours per week. Students were randomly assigned to 48 teams of three to four students (Mean team size = 3.37) on the first day of class and tasked with planning and producing a set of dishes each week. Specific tasks included menu planning, cooking the meal, and serving the final creation. Creativity in meal design was emphasized and encouraged in this class, particularly through “mystery basket” assignments in which new ingredients were introduced that had to be incorporated into the meal. In addition, characteristic of restaurant settings, multiple dishes were produced simultaneously and needed to be completed at the same time for effective service.

### **Measures**

A four-item U-shaped pacing style scale was measured on a 5-point Likert scale during the first course week ( $\alpha = .69$ ). Items were adapted from the Pacing Action Categories of Effort Distribution (PACED) scale (Gevers et al., 2015). The lowest U-shaped pacing style member score in the team represented the minimum pacing style value.

Team Temporal Leadership ( $\alpha = .93$ ) was assessed during the tenth week of the course (before course grades were assigned) via Mohammed and Nadkarni’s (2011) seven-item scale. Aggregation to the team-level was justified ( $r_{wg(j)} = .84$ ,  $ICC(1) = .11$ ,  $ICC(2) = .29$ ).

Performance was measured through two constructs: team timeliness and team creativity. Both were evaluated by course instructors at the end of the ten-week semester after the team’s final performance. Timeliness consisted of two-items assessing temporal coordination and the extent to which meals were completed on time ( $\alpha = .68$ ). Creativity consisted of one item assessing the creativity of the team’s output.

### **Control Variables**

Because both can impact team outcomes, we controlled for team size (e.g., Somech, 2006) and the proportion of the team that was female (e.g., Baugh & Graen, 1997; Stokes, Steele-Johnson, & Narayan, 2007). We also accounted for whether the culinary course was a cooking or baking class.

## **RESULTS**

### **Data Analysis**

All analyses were conducted at the team level. Table 1 provides descriptive statistics and correlations for all variables. Hierarchical regressions were used to test the hypotheses, and variables were mean centered for ease of interpretability (Aiken & West, 1991). Control variables were entered in the first regression step. Minimum team U-shaped pacing style was entered in the second, followed by temporal leadership. The interaction term between minimum U-shaped pacing style and temporal leadership was entered in the fourth step.

**TABLE 1**  
**DESCRIPTIVE STATISTICS AND CORRELATIONS**

	<i>M(SD)</i>	1	2	3	4	5	6
<i>Controls</i>							
1. Cooking vs. Baking <sup>a</sup>	.25(.44)	1.0					
2. Team Size	3.37(.49)	-.45**	1.0				
3. Proportion of Females <sup>b</sup>	.58(.38)	.59**	-.29*	1.0			
<i>Pacing Style</i>							
4. Minimum U-Shaped Style	2.21(.56)	-.06	-.04	.11	1.0		
<i>Moderator</i>							
5. Temporal Leadership	3.37(.61)	.04	-.04	-.13	.11	1.0	
<i>Outcomes</i>							
6. Team Timeliness	3.90(.62)	.13	-.18	-.04	.32*	.17	1.0
7. Team Creativity	3.31(.94)	.51**	-.20	.12	.26	.28*	.51**

Note. *N* = 48 teams.

<sup>a</sup>Dummy coded variable indicating cooking versus baking course, 0 = Cooking, 1 = Baking

<sup>b</sup>Proportion of the team that is female

\* *p* < .05, two-tailed; \*\* *p* < .01, two-tailed

### Hypothesis Testing

Hypothesis 1 predicted that minimum team U-shaped pacing style positively relates to team creativity and was supported by a significant main effect ( $\beta = 0.35$ ,  $p < 0.05$ ), accounting for 10% of the variance in creativity beyond controls (see Table 2).

**TABLE 2**  
**HIERARCHICAL REGRESSION ANALYSES TESTING THE EFFECT OF MINIMUM U-SHAPED PACING STYLE ON CREATIVITY**

<i>Variable</i>	Step 1			Step 2			Step 3			Step 4		
	<i>b</i>	<i>SE</i>	$\beta$	<i>b</i>	<i>SE</i>	$\beta$	<i>b</i>	<i>SE</i>	$\beta$	<i>b</i>	<i>SE</i>	$\beta$
<i>Controls</i>												
Cooking vs. Baking <sup>a</sup>	1.49	.36	.66**	1.63	.34	.72**	1.57	.34	.69**	1.69	.35	.75**
Team Size	-.02	.27	-.01	.03	.25	.02	.04	.25	.02	.06	.25	.03
Proportion of Females	-.63	.38	-.25	-.81	.36	-.32*	-.65	.36	-.26 <sup>†</sup>	-.65	.36	-.26 <sup>†</sup>
<i>Pacing Style</i>												
Minimum U-Shaped Style				.57	.21	.33**	.49	.21	.28*	.60	.23	.35*
<i>Moderator</i>												
Temporal Leadership							.33	.19	.21 <sup>†</sup>	.34	.19	.22 <sup>†</sup>
<i>Interaction</i>												
U Style x Temporal Leadership										.53	.42	.17

Note. *N* = 48 teams.

<sup>a</sup>Dummy coded variable indicating cooking versus baking course, 0 = Cooking, 1 = Baking

<sup>†</sup>*p* < .10., \**p* < .05. \*\**p* < .01

Hypothesis 2 proposed that minimum team U-shaped pacing style positively predicts team timeliness and was supported. As indicated in Table 3, the main effect of minimum U-shaped pacing style on timeliness was significant and positive ( $\beta = 0.45, p < 0.01$ ), accounting for 12% of the variance in timeliness beyond controls.

Hypothesis 3 predicted that team temporal leadership moderates the relationship between minimum U-shaped pacing style and team timeliness, such that the relationship is more positive when temporal leadership is stronger. Depicted in Table 3, the interaction term was approaching significance ( $\beta = 0.27, p < 0.10$ ) and accounted for 5% of the variance in timeliness beyond the controls, minimum U-shaped pacing style, and temporal leadership.

**TABLE 3**  
**HIERARCHICAL REGRESSION ANALYSES TESTING THE EFFECT OF MINIMUM U-SHAPED PACING STYLE ON TIMELINESS**

	Step 1			Step 2			Step 3			Step 4		
<i>F</i>	0.88			2.31*			1.87			2.11		
<i>R</i> <sup>2</sup>	.06			.18*			.18			.24		
$\Delta R^2$	.06			.12*			.01			.05		
<i>Variable</i>	<i>b</i>	<i>SE</i>	$\beta$	<i>b</i>	<i>SE</i>	$\beta$	<i>b</i>	<i>SE</i>	$\beta$	<i>b</i>	<i>SE</i>	$\beta$
<i>Controls</i>												
Cooking vs. Baking <sup>a</sup>	.23	.28	.16	.33	.26	.23	.32	.27	.22	.46	.28	.31
Team Size	-.20	.21	-.16	-.17	.20	-.13	-.17	.20	-.13	-.15	.19	-.12
Proportion of Females	-.28	.29	-.17	-.41	.28	-.25	-.38	.29	-.23	-.37	.28	-.23
<i>Pacing Style</i>												
Minimum U-Shaped Style				.40	.16	.35*	.38	.17	.34*	.51	.18	.45**
<i>Moderator</i>												
Temporal Leadership							.07	.15	.07	.09	.15	.09
<i>Interaction</i>												
U Style x Temporal Leadership										.56	.33	.27 <sup>†</sup>

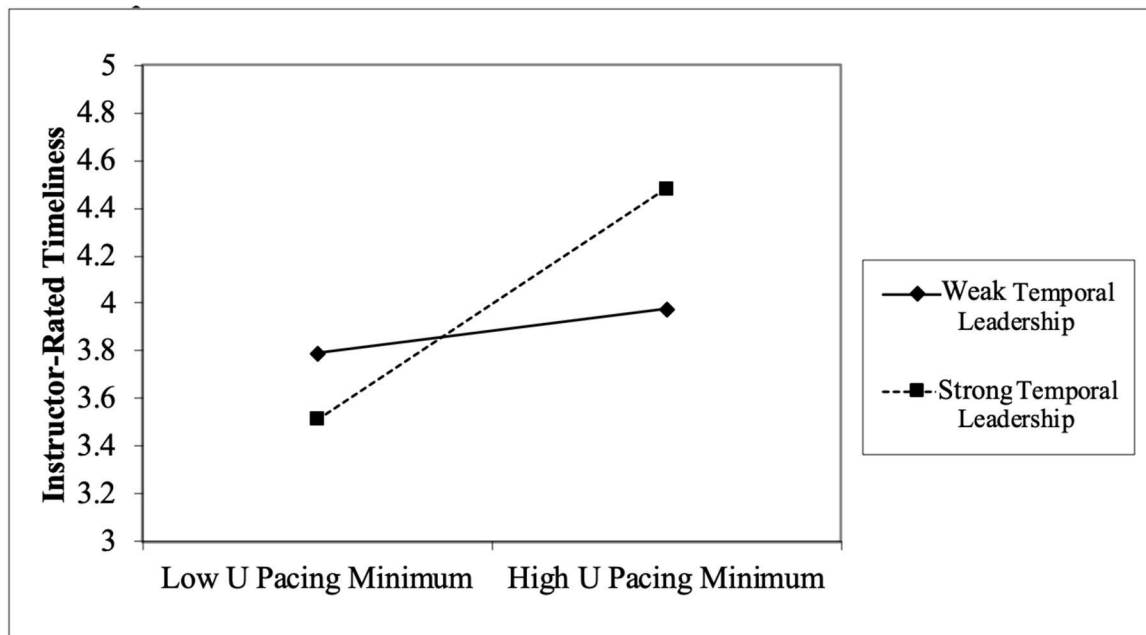
Note. *N* = 48 teams.

<sup>a</sup>Dummy coded variable indicating cooking versus baking course, 0 = Cooking, 1 = Baking

<sup>†</sup> $p < .10$ , \* $p < .05$ , \*\* $p < .01$

Figure 1 portrays the interaction plot denoting temporal leadership at one standard deviation above and below the mean (Aiken & West, 1991). Simple slope analyses indicated that when temporal leadership was high, the relationship between minimum U-shaped style and timeliness was significant and positive ( $t = 2.53, p < .05$ ). When temporal leadership was low, the relationship between minimum U-shaped style and timeliness was not significant ( $t = -0.19, p > .05$ ). Although the interaction was in the expected direction, the interaction term was only approaching significance, therefore Hypothesis 3 is not supported.

**FIGURE 1**  
**INTERACTION BETWEEN MINIMUM U-SHAPED PACING STYLE AND TEMPORAL LEADERSHIP ON TEAM TIMELINESS**



Note. Strong temporal leadership slope is significant ( $p < .05$ ) while weak temporal leadership slope is insignificant ( $p > .05$ )

**DISCUSSION**

This study found that team members with low U-shaped pacing styles acted as weak links in their teams, reducing both team creativity and timeliness. Although results are not definitive, perhaps due to low team sample size, Figure 1 suggests that team temporal leadership may be a possible way to leverage the benefits of the U-shaped pacing style.

**Theoretical Implications**

*U-Shaped Pacing Style*

As a newer addition to the temporal individual difference literature (Mohammed & Harrison, 2013), much remains to be known about pacing style, particularly at the team-level. In addition, the U-shaped style is the least studied of the pacing styles (Gevers et al., 2015). Remediating these deficiencies, the current study expanded the nascent work on pacing style by demonstrating the predictive effects of minimum U-shaped style on creativity and timeliness. Findings further support the significance of pacing style as a temporal individual difference that impacts key team outcomes.

*Weakest Link U-Shaped Pacing Style Members*

Prior temporal composition research, and more specifically pacing style studies, have largely focused on the team average (e.g., Gevers et al., 2009) or diversity (Mohammed & Nadkarni, 2011), thereby assuming all members should be weighted equally. However, our findings highlight that the entire team can be held back by the one team member with a low U-shaped pacing style. A focus on average characteristics in teams may mask the influence of the lowest scoring member, which may be key to explaining why teams composed of talented members sometimes fail. The small, but growing, research on weakest link teammates has focused on characteristics such as low goal orientation (Valcea et al., 2019), disagreeableness (Bell, 2007), and poor affect (Felps, Mitchell, & Byington, 2006). However, our research



extends this work to demonstrate that minimum U-shaped pacing style, as an under-researched temporal composition variable, lowered team creativity and timeliness.

### *Temporal Leadership*

Can temporal leaders help prevent the negative effects of the “weakest link” U-shaped member? Although our study cannot provide a definitive answer due to an interaction that was only approaching significance, findings were in the expected direction. Specifically, when minimum U-shaped pacing style was high, team timeliness was higher when temporal leadership was stronger rather than weaker.

### **Limitations and Future Directions**

Although classes were combined to garner a higher team sample size, power was lower than desirable, especially to detect significant interactions. Therefore, future research should continue to explore temporal leadership as a possible intervention to mitigate the negative effects of teams’ weakest link member. Although culinary students were trained in a creative context that represented the task requirements of professional kitchens, future research should examine what other settings lend themselves to a U-shaped pacing style.

The nature of the team task represents a key boundary condition for our results, which are especially appropriate for conjunctive and highly task interdependent tasks. However, study findings would not be expected to replicate in low task interdependence or additive (member contributions are summed to represent team outcomes) tasks. The task context determines which operationalization is most suitable (Mathieu et al., 2014).

### **CONCLUSION**

The purpose of this study was to examine the effects of teams’ minimum U-shaped pacing style member on team timeliness and creativity, as moderated by temporal leadership. In doing so, we expanded the team composition literature, which has focused mainly on averages or standard deviations within a team and has paid little attention to conjunctive models and the nascent work on pacing styles as a temporal individual difference. Attending to these deficiencies in a culinary context, study results demonstrated that the lower the U-shaped pacing style of the minimum member, the lower timeliness and creativity team outcomes. Results highlight the promise of further investigating conjunctive models in team composition research, the minimum U-shaped pacing style member, and temporal leadership as a potential intervention to remediate the negative influence of weakest link pacing style teammates.

### **REFERENCES**

- Aiken, L.S., & West, S.G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage Publications, Inc.
- Aron, L., Botella, M., & Lubart, T. (2019). Culinary arts: Talent and their development. In R.F. Subotnik, P. Olszewski-Kubilius, & F.C. Worrell (Eds.), *The psychology of high performance: Developing human potential into domain-specific talent* (pp. 345-359). Washington, DC: American Psychological Association.
- Baugh, S.G., & Graen, G.B. (1997). Effects of team gender and racial composition on perceptions of team performance in cross-functional teams. *Group & Organization Management*, 22(3), 366–383. <https://doi.org/10.1177/1059601197223004>
- Bell, S.T. (2007). Deep-level composition variables as predictors of team performance: A meta-analysis. *The Journal of Applied Psychology*, 92(3), 595–615. <https://doi.org/10.1037/0021-9010.92.3.595>
- Bouty, I., & Gomez, M.L. (2015). Creativity at work: Generating useful novelty in haute cuisine restaurants. In R. Garud, B. Simpson, A. Langley, & H. Tsoukas (Eds.), *The emergence of novelty in organizations* (pp. 216-242). Oxford, England: Oxford University Press.

- Claessens, B.J.C. (2004). *Perceived Control of Time: Time Management and Personal Effectiveness at Work*. PhD Dissertation. <https://doi.org/10.6100/IR582438>
- Felps, W., Mitchell, T.R., & Byington, E. (2006). How, when, and why bad apples spoil the barrel: Negative group members and dysfunctional groups. *Research in Organizational Behavior*, 27, 175-222.
- Fine, G.A. (2008). *Kitchens: The culture of restaurant work*. Univ of California Press.
- Gevers, J.M.P., & Demerouti, E. (2013). How supervisors' reminders relate to subordinates' absorption and creativity. *Journal of Managerial Psychology*, 28(6), 677-698. <https://doi.org/10.1108/JPM-09-2011-0055>
- Gevers, J.M.P., Claessens, B.J.C., van Eerde, W., & Rutte, C.G. (2009). Pacing styles, personality, and performance. In R.A. Roe, M.J. Waller, & S.R. Clegg (Eds.), *Time in organizational research* (pp. 80-102). London: Routledge.
- Gevers, J.M.P., Mohammed, S., & Baytalskaya, N. (2015). The Conceptualisation and Measurement of Pacing Styles. *Applied Psychology*, 64(3), 499-540. <https://doi.org/10.1111/apps.12016>
- Gevers, J.M.P., Rispens, S., & Li, J. (2016). Pacing style diversity and team collaboration: The moderating effects of temporal familiarity and action planning. *Group Dynamics*, 20(2), 78-92. <https://doi.org/10.1037/gdn0000049>
- Maguire, K., & Howard, M. (2001). A study of the social and physical environment in catering kitchens and the role of the chef in promoting positive health and safety behaviour. *International Journal of Environmental Health Research*, 11(3), 203-217.
- Maruping, L., Venkatesh, V., Thatcher, S., & Patel, P. (2015). Folding under pressure or rising to the occasion? Perceived time pressure and the moderating role of team temporal leadership. *Academy of Management Journal*, 58(5), 1313-1333. <https://doi.org/10.5465/amj.2012.0468>
- Mathieu, J.E., Tannenbaum, S.I., Donsbach, J.S., & Alliger, G.M. (2014). A Review and Integration of Team Composition Models: Moving Toward a Dynamic and Temporal Framework. *Journal of Management*, 40. <https://doi.org/10.1177/0149206313503014>
- Mohammed, S., & Harrison, D.A. (2013). The clocks that time us are not the same: A theory of temporal diversity, task characteristics, and performance in teams. *Organizational Behavior and Human Decision Processes*, 122, 244-256. <https://doi.org/10.1016/j.obhdp.2013.08.004>
- Mohammed, S., & Nadkarni, S. (2011). Temporal diversity and team performance: The moderating role of team temporal leadership. *The Academy of Management Journal*, 54(3), 489-508. <https://doi.org/10.5465/amj.2011.61967991>
- Mohammed, S., Alipour, K.K., Martinez, P., Livert, D., & Fitzgerald, D. (2017). Conflict in the kitchen: Temporal diversity and temporal disagreements in chef teams. *Group Dynamics*, 21(1), 1-19. <https://doi.org/10.1037/gdn0000058>
- Murray-Gibbons, R., & Gibbons, C. (2007). Occupational stress in the chef profession. *International Journal of Contemporary Hospitality Management*, 19(1), 32-42. <https://doi.org/10.1108/09596110710724143>
- Santos C.M., Passos, A.M., Uitdewilligen, S., & Nübold, A. (2016). Shared temporal cognitions as substitute for temporal leadership: An analysis of their effects on temporal conflict and team performance. *The Leadership Quarterly*, 27(4), 574-587.
- Segal, E. (2004). Incubation in insight problem solving. *Creativity Research Journal*, 16(1), 141-148. [https://doi.org/10.1207/s15326934crj1601\\_13](https://doi.org/10.1207/s15326934crj1601_13)
- Shamir, B. (2011). Leadership takes time: Some implications of (not) taking time seriously in leadership research. *The Leadership Quarterly*, 22(2), 307-315.
- Somech, A. (2006). The effects of leadership style and team process on performance and innovation in functionally heterogeneous teams. *Journal of Management*, 32(1), 132-157. <https://doi.org/10.1177/0149206305277799>
- Steiner, I.D. (1972). *Group process and productivity*. New York: Academic Press.
- Stierand, M. (2015). Developing creativity in practice: Explorations with world-renowned chefs. *Management Learning*, 46(5), 598-617. <https://doi.org/10.1177/1350507614560302>

- Stokes, C.K., Steele-Johnson, D., & Narayan, A. (2007). Gender composition of teams: Effects of competition. *Team Performance Management, 13*(5/6), 160–171. <https://doi.org/10.1108/13527590710831864>
- Valcea, S., Hamdani, M., & Bradley, B. (2019). Weakest Link Goal Orientations and Team Expertise: Implications for Team Performance. *Small Group Research, 50*(3), 315-347.
- Van Eerde, W., Beeftink, F., & Rutte, C.G. (2016). Working on something else for a while: Pacing in creative design projects. *Time and Society, 25*(3), 676–699. <https://doi.org/10.1177/0961463X15577274>
- Yuan, C.C., & Lo, S.H. (2018). Relationship Among Team Temporal Leadership, Competency, Followership, and Performance in Taiwanese Pharmaceutical Industry Leaders and Employees. *Journal of Career Development, 45*(3), 227–238. <https://doi.org/10.1177/0894845316680087>