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Psychometric Evaluation of the Action Control Scale in Turkish Samples and the Relationship of Action–State Orientation with Emotional Labor

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ABSTRACT

The Action Control Scale (ACS-90) measures action–state orientation (ASO), which describes individual differences in volitional processes such as goal initiation and maintenance. In this study, we examine psychometric properties of a Turkish translation of the ACS-90 (ACS-T). Moreover, we extend past research by investigating the relationship between ASO and emotional labor measured as a trait and a state construct. We conducted four studies to address our aims. Study 1 ($N = 569$) shows that the revised 23-item ACS-T with three factors (preoccupation, hesitation, and volatility) provides a good fit to the data and displays acceptable reliability. Study 2 ($N = 377$) confirms the factor structure of the 23-item ACS-T and provides evidence for construct validity. Study 3 ($N = 159$) shows that the hesitation subscale negatively predicts trait surface acting. Study 4 ($N = 74$, daily responses $= 231$) indicates that the preoccupation and hesitation subscales negatively predict state surface acting. Altogether, the results show that the 23-item three-factor ACS-T displays good psychometric qualities in Turkish samples and that ASO is relevant to emotional labor research.

Action–state orientation

The theory of action and state orientation (ASO) is concerned with why people fail to engage in and execute their intended goals despite high motivation and adequate cognitive capabilities. It highlights how goal striving is affected by volitional aspects, including self-regulatory mechanisms such as selective attention, affect regulation, or maintaining attention during goal completion (Kuhl, 1984). ASO thus captures individual differences in utilizing volitional abilities that facilitate intention enactment and maintenance (Baumann et al., 2005; Kuhl, 1987, 1994b). Action-oriented individuals are better at staying focused on the task at hand, more likely to detach themselves from intrusive thoughts and affect that may interfere with goal initiation and execution, and better at utilizing resources that facilitate goal initiation in demanding situations. In contrast, state orientation is characterized by the inability to escape from the state-oriented mode in the face of unwanted or demanding goals. Unlike their action-oriented counterparts, state-oriented people are more easily distracted by intrusive thoughts and have difficulties initiating and staying focused on goals (Kazén & Quirin, 2018; Kuhl, 1994a).

Kuhl (1994a) identified three bipolar dimensions of ASO that pertain to distinct processes involved in goal enactment and maintenance. *Preoccupation (vs. disengagement)* is the inability to disengage from distractions that impede goal attainment, such as ruminative thoughts and intrusions about negative experiences or alternative goals.

Individuals who are state-oriented on the preoccupation dimension have difficulty controlling negative affect and such intrusive thoughts, while those who are action-oriented on this dimension can efficiently regulate negative affect and disengage from persistent thoughts that may interfere with their intended goal (Kazén et al., 2003; Kuhl, 1994a). *Hesitation (vs. initiative)* is the inability to initiate intended actions, especially when faced with difficult or demanding goals. Individuals who are state-oriented on the hesitation dimension struggle to implement intentions and initiate goals, whereas action-oriented individuals do not, more easily directing their attentional resources to their goals (Diefendorff, 2004, Kuhl, 1994a). Affect regulation is an important mechanism through which action orientation facilitates goal enactment. Theory and past research suggest distinctive affect regulation processes for the preoccupation and hesitation dimensions such that action orientation in the preoccupation dimension is closely tied to reducing negative affect and action orientation in the hesitation dimension is related to generating positive affect (Baumann et al., 2005, 2007; Koole & Jostmann, 2004; Kuhl, 2000a). The third dimension is termed *volatility (vs. persistence)* and is the extent to which one pursues an intended goal to completion. State-oriented people tend to quit the intended goal before completion, whereas action-oriented individuals persist by maintaining their attention and shielding it against competing alternative actions (Diefendorff et al., 2018; Kuhl, 1994a). The volatility dimension diverges from the preoccupation and hesitation dimensions in that the

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former relates to volitional processes after goal initiation and the latter two to processes before goal initiation.

A series of meticulous studies have been conducted to develop a measure for ASO, resulting in the Action Control Scale (ACS-90). Kuhl (1994b) found the 36-item three-factor ACS-90 to have good psychometric qualities. Later, the scale was subjected to a rigorous examination by Diefendorff et al. (2000), finding that some items do not perform well due to poor factor loadings or cross-loading. They suggested a revised 22-item three-factor solution that provided a good fit and showed acceptable psychometric properties.

The first aim of the current study is to evaluate a Turkish version of the ACS, the ACS-T, psychometrically. To our knowledge, ACS-90 has not been tested in Turkish samples previously. Moreover, evaluating the psychometric properties of the ACS-90 is further warranted because previous work has developed versions with different numbers of scale items. We also aim to extend past research on the psychometric evaluation of the ACS-90 by testing whether the conceptual differences between the preoccupation and hesitation subscales are reflected in their relationships with cognitive, affect, and personality variables. Specifically, we expect the preoccupation and hesitation subscales to differentially relate to the cognitive emotion regulation strategies, negative and positive affect, and personality traits of neuroticism and extraversion.

Association between ASO and emotional labor

Emotional labor describes the process of managing emotions to meet work requirements (Hochschild, 1983). Although emotional labor has been studied through different lenses, the emotion regulation approach attracted considerable scholarly interest. This approach recognizes two types of regulating emotions, surface acting and deep acting (Grandey, 2000; Grandey et al., 2013). Surface acting is emotion management by modifying emotional expression, while deep acting is the effort to modify actual emotions to meet the work-related emotional demands of an organization (Grandey, 2000). When a job requires the display of positive emotions, employees are using the emotion management strategy of surface acting if they mask negative emotions by adjusting their expressions. Their actual emotions are suppressed, and the expressed ones are fake. If engaging in deep acting, on the other hand, they will manage negative emotions by trying to align them with the required emotions (Totterdell & Holman, 2003).

We argue that action orientation is negatively related to surface acting and deep acting for two reasons. First, employees typically resort to surface acting and deep acting when there is incongruence between the felt and required emotions (Morris & Feldman, 1996). For example, emotional labor is required when an employee is in a bad mood but is required to display positive emotions to a customer. Theory and studies have shown that action orientation is closely related to regulation of affect. Specifically, action-oriented individuals are better than state-oriented individuals are at reducing negative affect and generating positive affect (Kazén & Quirin, 2018). Thus, it is likely that action-oriented individuals would more effectively adjust their emotions to be congruent with the emotional requirements of the work when necessary. Moreover, Kuhl (2000a) argued that affect regulation ability is shaped through early socialization practices that involve repeated associative learning experiences with the caregiver. Consequently, affect regulation gradually becomes well-practiced and integrated into the self, predisposing individuals to display effortless, fast, and effective emotion regulation across different situations, which in our case is emotion regulation in the workplace.

Second, the work requirements that entail the use of emotional labor can be quite demanding for employees. Most service jobs have emotion display rules, complying with which may place high pressure on employees and cause them to employ surface acting and deep acting. Grandey et al. (2015) argued that meeting emotion display rules through emotional labor is a demanding and resource-depleting process, and the theory of ASO postulates that the difference between the two orientations becomes especially salient during demanding tasks or situations. Several studies have found that action-oriented individuals outperform their state-oriented counterparts under such conditions (e.g., Gröpel et al., 2014; Jostmann & Koole, 2006). A study even reported that action-oriented individuals performed *better* under high (vs. low) demands (Jostmann & Koole, 2007), leading Koole et al. (2012) to conclude that action-oriented individuals are invigorated rather than depleted by high demands. This line of argument adds to our expectation that action-oriented individuals would be more equipped to initiate and handle the emotional requirements of the job and less likely to resort to surface acting and deep acting.

However, surface and deep acting differ in their personal cost and effectiveness. Surface acting demands that employees exert constant effort to maintain appropriate emotional displays. In line with this, meta-analytic investigations have found that surface acting is negatively related to personal and organizational outcomes (Hülsheger & Schewe, 2011; Kammeyer-Mueller et al., 2013). Deep acting, on the other hand, has been argued to be resource-depleting for a shorter period and consequently less laborious (Grandey, 2000; Totterdell & Holman, 2003). Moreover, since deep acting involves altering the experience of emotions to be congruent with display rules, it is related to desired performance-related outcomes (Hülsheger & Schewe, 2011; Kammeyer-Mueller et al., 2013). Drawing on these findings, we predict that the negative relationship between action orientation and surface acting will be stronger than that between action orientation and deep acting.

Emotional labor has been conceptualized as a trait construct (i.e., dispositional tendencies toward employing surface and deep acting) and also an episodic process in response to incidents such as customer incivility (Grandey et al., 2004) or affective events (Diefendorff et al., 2008) that results in incongruence between felt and required emotions. In fact, the emotion regulation process involved in

emotional labor has been shown to vary within a day (e.g., Judge et al., 2009) and even within a single interaction episode (Gabriel & Diefendorff, 2015). Thus, efforts to understand the emotional labor process should take its dynamic and situation-related aspects into account (Beal & Trougakos, 2013). The theory of ASO emphasizes characteristics of the situations and their interaction with more stable personal differences (i.e., ASO). Kuhl (1985) stated that one could behave in an action- or state-oriented way depending on context. The theory highlights the dynamic interplay between emotional states and self-regulatory processes that unfolds through responses to threatening or demanding situations. For example, action-oriented individuals can more effectively detach themselves from the negative affect caused by past negative experiences than state-oriented individuals, and this difference becomes more pronounced as the influence of the situation increases. Consequently, in emotional labor-inducing contexts, action-oriented people can be expected to detach themselves more efficiently from the negative emotions or thoughts caused by customer incivility or affective events, failure of which would presumably lead to employing surface or deep acting. Based on these considerations, we expect that action orientation will be negatively related to within-person variations in the use of emotional labor strategies.

Overall, we argue that ASO is relevant to emotional labor. It taps into the core characteristics of the emotional labor process because it captures both the emotion regulation and demand-related aspects of emotional labor. To solidify our arguments, we include a third type of strategy, expression of naturally felt emotions (Diefendorff et al., 2005), and test its relationship with ASO. Expression of naturally felt emotions is spontaneously displaying desired emotions—those that surface and deep acting compensate for a lack of (Ashforth & Humphrey, 1993; Diefendorff et al., 2005). In contrast to surface acting and deep acting, we expect action orientation to correlate positively with naturally felt emotions. Since the expression of naturally felt emotions constitutes an absence of emotion regulation, action orientation is likely to be positively related to experiencing such emotions. In summary, the second aim of the current study is to investigate the association between ASO and emotional labor measured as a trait and state construct.

Overview of the studies

We addressed our aims through four studies. In Study 1, we tested the factor structure and reliability of the ACS-T in a student sample. In Study 2, we re-tested the same structure in a non-student sample and assessed the validity of the ACS-90. Studies 3 and 4 were conducted to examine the relationship between the three subscales of the ACS-90 and emotional labor. Specifically, in Study 3, we assessed the relationship between ASO and emotional labor strategies as a trait construct in a sample of teachers. In Study 4, we examined the relationship between ASO and state emotional labor with data collected daily from working adults.

Study 1

Method

Participants and procedure

A total of 569 undergraduate students (434 women and 135 men) at Ege University, Turkey, participated in the study in exchange for course credit. The mean age of the participants was 21.03 ($SD = 2.77$).

A questionnaire package was delivered to the student volunteers. All participants provided informed consent and filled out the questionnaires in classrooms. The questionnaires took approximately 15 minutes to complete. Forty-five participants filled out the ACS-90 one week later, and 66 participants filled it out four weeks later for test-retest reliability assessments. Approval was obtained from the research ethics board of the university (protocol number: 390-2017). Following the procedure recommended by Brislin (1970), three scholars translated the English form of ACS-90 into Turkish, and two different scholars back-translated the Turkish form. Discrepancies were discussed and resolved.

Measures

The Action Control Scale (ACS-90). The ACS-90 was developed to measure individual differences in volitional abilities. The scale requires that respondents choose between an action-oriented and a state-oriented response to the situation depicted in each item. The preoccupation (example item: When something really gets me down, [a] I have trouble doing anything at all, [b] I find it easy to distract myself by doing other things), hesitation, (example item: When I have a lot of important things to do and they must all be done soon, [a] I often do not know where to begin, [b] I find it easy to make a plan and stick with it, and volatility (example item: When I read something I find interesting, [a] I sometimes still want to put the article down and do something else, [b] I will sit and read the article for a long time; option a in all three items denotes the state-oriented response and option b denotes action-oriented response) subscales are each measured with 12 items, making 36 items in total. Stated-oriented responses get a score of 0 and action-oriented responses get a score of 1. After the transformation of reverse-scored items, the scores for each subscale are created by summing its items, with high scores indicating action-oriented responses. The ACS-90 displayed adequate psychometric qualities in the study conducted by Kuhl (1994b). The Cronbach Alpha reliability scores were .70, .78, and .74 for the preoccupation, hesitation, and volatility subscales, respectively.

Results and discussion

Factorial validity

Following the procedure of Diefendorff et al. (2000), we conducted a series of confirmatory factor analyses that tested empirical or theory-driven alternative factorial structures of the ACS-90. The ACS-90 has been subjected to rigorous examination throughout its development and use. Various plausible factor structures have emerged or been suggested

based on theory and research findings. Drawing on that research, Diefendorff et al. (2000) tested one-factor, two-factor, three-factor, and five-factor models as alternative ACS-90 factor structures. The one-factor model measured a unidimensional action–state orientation, whereas the two-factor model combined the preoccupation and hesitation subscales into a single construct, with volatility measuring a different construct. The three-factor model with the preoccupation, hesitation, and volatility subscales is the most supported by theory and empirical findings (e.g., Kuhl, 1994b). Lastly, Kanfer et al. (1994) derived a five-factor model with discipline, failure, persistence, absorption, and planning dimensions through exploratory factor analysis.

We conducted confirmatory factor analyses with mean and variance adjusted weighted least squares (WLSMV) estimation since the scale items were dichotomous (Flora & Curran, 2004). To assess model fit, we applied the criteria described in Hu and Bentler (1999), specifically, RMSEA <.06, CFI and TLI >.95, and SRMR <.08. One may note that the analyses conducted in Hu and Bentler (1999) utilized maximum likelihood estimation. However, Yu (2002) showed that when the sample size is large ($N > 250$), the fit indices obtained from WLSMV, except for SRMR, perform relatively similarly to those obtained using maximum likelihood. We report chi-square tests but do not emphasize them, as they are less reliable at large sample size. The metric of the models was set by fixing the factor variances to 1.0.

The confirmatory factor analysis (CFA) model fits for the alternative models are provided in Table 1. None of the tested models provided an acceptable fit to the data. Moreover, the five-factor model test produced an error due to a correlation greater than 1.0 between persistence and absorption. We inspected the possible sources of poor fit for each model and found the primary causes to be low item loadings and cross-loadings on a different factor. In each model, we dropped items that had low factor loading (<.40) and items with cross-loadings[1].

The model fit indices of the revised models are provided in Table 1. We could not compare the models with each other as there is no available procedure for comparing non-nested models estimated with WLSMV. Nevertheless, the only model that met the criteria described by Hu and Bentler (1999) was the three-factor model, RMSEA = .037, CFI = .955, TLI = .950, and SRMR = .071. Other models did not meet two or more of the absolute fit criteria (see Table 1). The five-factor model came close but had factor structure problems. The correlation between the persistence and absorption dimensions was still greater than 1.0. Moreover, the item loadings of the remaining two items of

Table 1. Model fit indices for alternative CFA models of the ACS-T.

Model	χ^2	df	RMSEA	CFI	TLI	SRMR
36-item ACS-T						
1-factor	2297.43***	594	.071 [.068 .074]	.697	.678	.131
2-factor	1792.96***	593	.060 [.056 .063]	.786	.773	.117
3-factor	1284.16***	591	.045 [.042 .049]	.877	.868	.097
5-factor[a]	1696.14***	584	.058 [.055 .061]	.802	.786	.112
Revised scales						
1-factor	935.46***	152	.095 [.089 .101]	.829	.807	.118
2-factor	667.72***	169	.072 [.066 .078]	.886	.872	.098
3-factor	407.67***	227	.037 [.031 .043]	.955	.950	.071
5-factor[a]	482.58***	242	.042 [.036 .047]	.949	.942	.073

Note: $N = 569$.
[a]Analysis resulted in not positive definitive latent variable covariance matrix. The values in brackets are 90% confidence intervals of RMSEA.
***$p < .001$.

the persistence dimension were less than .40, though these were retained for reporting purposes. Altogether, these results confirmed past theoretical and empirical findings that the three-factor model is the best-fitting model for the ACS-90 and, by extension, the ACS-T.

The factor loadings of the revised ACS-T varied between .41 and .84 (see Table 2). The correlation between the preoccupation and hesitation subscales was moderate and positive ($r = .40$, $p <.001$), while the correlation between the preoccupation and volatility subscales was not significant ($r = .02$, $p = .72$). The hesitation subscale was positively correlated with the volatility subscale ($r = .31$, $p <.001$). We inspected the correlations between the 36-item and revised 23-item versions of the ACS-T. They were .97, .96, and .84 for the preoccupation, hesitation, and volatility subscales, respectively, indicating a significant overlap between the two forms. Consistent with previous theorizing that the conceptual and normative midpoints of the ACS-90 overlap (e.g., Jostmann & Koole, 2007; Koole & Van den Berg, 2005), the mean scores for the 12-item ($M = 4.66$, $SD = 2.92$) and revised 9-item ($M = 3.92$, $SD = 2.50$) preoccupation subscale and the 12-item ($M = 6.42$, $SD = 3.35$) and revised 8-item ($M = 3.92$, $SD = 2.51$) hesitation subscale were close to the midpoint. However, the means were slightly above the midpoint for the 12-item ($M = 8.29$, $SD = 2.43$) and revised 6-item ($M = 3.74$, $SD = 1.66$) volatility subscale.

Reliability

We evaluated the internal consistency, one-week test-retest reliability, and four-week test-retest reliability of the ACS-T. In addition to calculating Cronbach's alpha, we computed the categorical omega coefficients (Green & Yang, 2009) via the R package *MBESS* (Kelley, 2007). The results showed that the Cronbach's alpha values for preoccupation, hesitation, and volatility were .76, .81, and .65 for the 36-item ACS-T and .75, .80, and .63 for the revised 23-item ACS-T, respectively. The categorical omega estimates of the preoccupation, hesitation, and volatility subscales were .77, .84, and .70 for the 36-item ACS-T and .77, .81, and .67 for the 23-item ACS-T, respectively. These results indicate that internal consistency was satisfactory for the preoccupation and hesitation subscales and slightly low for the volatility subscale. Test-retest reliability was assessed by calculating correlations

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[1]Removed items in each model: 17 items from the one-factor model (items 1, 3, 6, 9, 12, 13, 15, 16, 18, 21, 22, 24, 25, 27, 30, 33, and 36), 16 items from the two-factor model (items 1, 4, 7, 10, 13, 16, 19, 22, 23, and 25 from the construct comprised of the preoccupation and hesitation dimensions and items 3, 9, 18, 21, 27, and 30 from the volition dimension), 13 items from the three-factor model (items 1, 13, and 25 from the preoccupation, items 8, 14, 23, and 26 from the hesitation, and items 3, 9, 18, 21, 27, and 30 from the volatility dimension), and 12 items from the five-factor model (item 33 from the discipline, items 13 and 25 from the failure, items 3, 9, and 27 from the persistence, items 12, 14, 18, and 30 from the absorption, and items 21 and 31 from the planning dimension).

Table 2. Item factor loadings of 36-item and 23-item ACS-T.

Items	Preoccupation 36-item	Preoccupation 23-item[a]	Hesitation 36-item	Hesitation 23-item[a]	Volatility 36-item	Volatility 23-item[a]
Item 1	.52	–				
Item 4	.57	.58				
Item 7	.59	.59				
Item 10	.54	.55				
Item 13	.39	–				
Item 16	.41	.41				
Item 19	.68	.68				
Item 22	.59	.57				
Item 25	.30	–				
Item 28	.69	.68				
Item 31	.75	.75				
Item 34	.83	.84				
Item 2			.74	.75		
Item 5			.49	.47		
Item 8			.59	–		
Item 11			.71	.70		
Item 14			.45	–		
Item 17			.72	.76		
Item 20			.76	.78		
Item 23			.46	–		
Item 26			.74	–		
Item 29			.82	.83		
Item 32			.71	.74		
Item 35			.80	.71		
Item 3					.21	–
Item 6					.48	.55
Item 9					.43	–
Item 12					.41	.41
Item 15					.63	.60
Item 18					.29	–
Item 21					.46	–
Item 24					.80	.81
Item 27					.44	–
Item 30					.15	–
Item 33					.65	.61
Item 36					.71	.74

Note: N = 569.
[a]Items with no value are the items dropped from the revised scale.

between variables at two time points. The one-week test-retest reliability values for preoccupation, hesitation, and volatility were .74, .70, and .69 for the 36-item ACS-T and .71, .69, and .68 for the 23-item ACS-T, respectively. The four-week test-retest reliability values for preoccupation, hesitation, and volatility were .75, .66, and .59 for the 36-item ACS-T and .71, .65, and .57 for the 23-item scale, respectively. These test-retest reliability estimates were satisfactory for the preoccupation subscale but low for the hesitation and volatility subscales. Nevertheless, the reliability estimates obtained in the current study are comparable to those reported in past research (Diefendorff et al., 2000; Kuhl, 1994b). The estimates for the 36-item and 23-item ACS-T were quite similar, indicating that removing items had a minor impact on reliability.

The results of Study 1 indicated that the revised ACS-T displays good factorial validity and acceptable reliability. In Study 2, we investigated whether the revised ACS-T displays a similar factorial structure in a non-student sample, as data-driven modifications of the model run the risk of reflecting sample characteristics (MacCallum et al., 1992). Moreover, we assessed the construct validity of the ACS-T by testing its associations with theoretically relevant cognitive, personality, and affect variables.

Study 2

The theoretical reasoning by which we formed expectations about relationships between the ASO with the examined variables is as follows. First, following Kuhl (1994b), we tested whether ASO and achievement motivation are distinct constructs. We expect it to have zero to moderate positive correlations with the ACS-T. Second, we expect significant and negative correlations between ACS-T and cognitive failures (Diefendorff et al., 2000; Wallace, 2004). Kuhl (1985) argued that state orientation interferes with action by devoting focus and attention to alternative past, present, or future states. Thus, being state-oriented tends to be associated with making more errors and mistakes in life. Third, action orientation involves effective coping in the form of self- and emotion regulation. State-oriented individuals have problems in coping with threatening situations, difficult demands, and alternative competing goals (Jostmann & Koole, 2010; Koole & Jostmann, 2004; Kuhl, 2000a). Thus, we expect associations between ASO and different forms of cognitive emotion regulation conceptualized by Garnefski et al. (2001). Specifically, we expect the ACS-T to positively correlate with the acceptance, positive refocusing, and positive reappraisal dimensions and negatively correlate with the self-blame, focus on thought, and catastrophizing dimensions of the Cognitive Emotion Regulation Questionnaire (CERQ). Moreover, since the CERQ assesses different coping strategies in response to threatening or stressful events, we expect stronger associations of the preoccupation than the hesitation with coping strategies. Specifically, the preoccupation subscale is predicted to have stronger associations with the dimensions of self-blame and catastrophizing than the hesitation subscale because the preoccupation subscale relates to an inability to reduce negative affect. Moreover, the preoccupation subscale was expected to have stronger associations with the acceptance and focus on thought dimensions than the hesitation subscale because the inability to detach from ruminative thoughts is one of the characteristics of preoccupation. Fourth, we expect a positive association between action orientation and positive affect and a negative association between action orientation and negative affect. Moreover, we predict a stronger correlation of preoccupation with negative than with positive affect and of hesitation with positive than with negative affect. These expectations are based on the argument that the preoccupation subscale describes the ability to reduce negative affect in stressful situations, while the hesitation subscale defines the ability to generate positive affect in demanding conditions (Baumann et al., 2007). Lastly, we expect significant but modest correlations between ASO and the personality traits of neuroticism and extraversion. Previous research documented that neuroticism more strongly relates to negative affect than positive affect and that extraversion more strongly relates to positive affect than negative affect (Costa & McCrae, 1980; Diener et al., 2003). We argue that the ASO dimensions of preoccupation, hesitation, and the personality traits of neuroticism and extraversion share conceptual similarities (e.g., Kuhl, 2000b). Since the relationships of neuroticism and extraversion with affect are similar to those

of preoccupation and hesitation with affect, we predict stronger correlations of preoccupation with neuroticism than with extraversion and of hesitation with extraversion than with neuroticism.

Method

Participants and procedure

The study sample consisted of employees working in diverse governmental and private organizations in the education, service, banking, business, and health sectors. A total of 377 employees (244 women and 133 men) participated in the study. The mean age of participants was 32.33 years ($SD = 12.28$). Of the participants, 73% ($N = 275$) had an associate's or bachelor's degree, 19% ($N = 72$) had graduated from high school, and 8% ($N = 30$) had postgraduate education. They had been employed in their current organization for an average of 8.03 ($SD = 9.00$) years. Data were collected through the personal contacts of the authors. An e-mail containing a questionnaire link along with an informed consent form was sent to employees either directly or through managers and human resources personnel. The informed consent form stated that participation is voluntary, that the research was being conducted by an independent group of researchers, and that participant responses would be kept anonymous and not shared with anyone. Before data collection, approval was obtained from the university ethics board (protocol number: 390-2017).

Measures

Action-state orientation. The action-state orientation was measured with the revised 23-item ACS-T.

Achievement motivation. We assessed achievement motivation using the revised 10-item Achievement Motives Scale developed by Lang and Fries (2006) and translated into Turkish by Çam (2016). The scale consists of 5-item hope of success (e.g., "I am attracted by tasks in which I can test my abilities") and 5-item fear of failure (e.g., "I feel uneasy to do something if I am not sure of succeeding") dimensions rated on a 4-point ($1 = strongly\ disagree$, $4 = strongly\ agree$) scale. Reliability estimates for the current study were derived by calculating Cronbach's alpha, as is done throughout this paper. The resulting values were .87 for hope of success and .82 for fear of failure.

Cognitive failures. We used the 25-item Cognitive Failures Questionnaire developed by Broadbent et al. (1982) and translated into Turkish by Şenkal et al. (2015) to measure cognitive failures. Participants answered questions about the frequency of simple mistakes they had made in the past six months using a 5-point scale ($0 = never$, $4 = very\ often$). An example item is "Do you fail to notice signposts on the road?" The reliability score of the scale in the present study is .94.

Cognitive emotion regulation. We collected cognitive emotion regulation ratings using the 18-item short version of the CERQ validated by Garnefski and Kraaij (2006) and translated into Turkish by Çakmak and Çevik (2010). The scale measures nine cognitive emotion regulation strategies, with two items for each strategy; six of these strategies were assessed in the current study. Participants rated how often (1 = [almost] never, 5 = [almost] always) they typically engage in self-blame (e.g., "I think that basically, the cause must lie within myself," $\alpha = .78$) , acceptance (e.g., "I think that I have to accept the situation," $\alpha = .72$), focus on thought (e.g., "I often think about how I feel about what I have experienced," $\alpha = .68$), catastrophizing (e.g., "I continually think how horrible the situation has been," $\alpha = .81$), positive refocusing (e.g., "I think of something nice instead of what has happened," $\alpha = .78$), and positive reappraisal (e.g., "I think I can learn something from the situation," $\alpha = .77$) in response to a life-threatening or stressful event.

Positive and negative affect. Participants rated trait affect by rating 10 positive and 10 negative mood adjectives on the Positive and Negative Affect Scale developed by Watson et al. (1988) and translated into Turkish by Gençöz (2000). Example mood adjectives are "excited" for positive affect and "upset" for negative affect. The items are rated on a 5-point scale ranging from $1 = very\ slightly\ or\ not\ at\ all$ to $5 = extremely$. Our data produced reliability estimates of .86 for positive affect and .87 for negative affect.

Neuroticism and extraversion. We measured neuroticism and extraversion using the Big Five Inventory developed by Benet-Martínez and John (1998) and translated into Turkish by Sümer et al. (2005). Participants indicated agreement on a 5-point scale ($1 = disagree\ strongly$, $5 = agree\ strongly$). Example items are "I see myself as someone who is depressed, blue" for neuroticism (8 items) and "I see myself as someone who is talkative" for extraversion (8 items). Our Cronbach Alpha scores were .79 for neuroticism and .69 for extraversion.

Results and discussion

Cross-validation

We first conducted CFA to test whether the revised three-factor model provides a good fit for the current sample. Consistent with the findings in Study 1, the revised three-factor model demonstrated good fit to the employee sample, $\chi^2(227, N = 377) = 337.805$, RMSEA = .036 [.028.044], CFI = .959, TLI = .954, and SRMR = .077. The factor loadings ranged from .42 to .83. The alpha reliability coefficients were .77, .81, and .62 and the categorical omega coefficients were .78, .83, and .66 for preoccupation, hesitation, and volatility, respectively. These results indicate the robustness of the three-factor model across the two samples.

Construct validity

We examined the correlations of the three subscales of the 36-item and 23-item ACS-T with the proposed cognitive,

Table 3. Correlations between the ACS-T subscales and variables used to test the construct validity.

	36-item ACS-90			23-item ACS-90			Difference[a]	
	F1	F2	F3	F1	F2	F3	z	p
Achievement motivation[b]	.37***	.35***	.15**	.40***	.29***	.16**	—	—
Cognitive failures	−.33***	−.49***	−.24***	−.36***	−.48***	−.28***	—	—
Self-blame	−.19***	−.22***	−.07	−.20***	−.19***	−.14**	−0.13	.45
Acceptance	.11*	.06	.10	.11*	.03	.05	1.52	.06
Focus on thought	−.17**	−.06	.13*	−.15**	−.05	.12*	−1.74	.04
Catastrophizing	−.35***	−.33***	−.09	−.37***	−.28***	−.11*	−1.75	.04
Positive refocusing	.28***	.29***	.01	.28***	.25***	.01	—	—
Positive reappraisal	.25***	.36***	.20***	.29***	.30***	.22***	—	—
Negative affect	−.31***	−.35***	−.19***	−.31***	−.32***	−.23***	0.06	.52
Positive affect	.27***	.43***	.19***	.29***	.41***	.28***	2.21	.01
Neuroticism	−.44***	−.38***	−.10	−.45***	−.34***	−.12*	−2.25	.01
Extraversion	.24***	.40***	.16**	.27***	.37***	.20***	1.97	.02

Note. $N = 377$.
[a]One-way z values were reported for the difference tests between preoccupation and hesitation subscales.
[b]Difference score was calculated by subtracting fear of failure scores from hope for success scores of the Achievement Motives Scale. F1: preoccupation, F2: hesitation, F3: volatility.
*$p < .05$, **$p < .01$, ***$p < .001$.

personality, and affect variables. We used the web interface of the R package *cocor* to compare correlations (Diedenhofen & Musch, 2015) and used the procedure outlined by Meng et al. (1992) in our reporting of correlation comparisons. The results are presented in Table 3. The correlations between the subscales of the ACS-T and achievement motivation ranged from .16 to .40, which supported our predictions. The correlations between the subscales of the ACS-T and cognitive failures were also significant and in the expected direction. Out of 18 correlations between the subscales of the ACS-T and the CERQ dimensions, 14 were significant, 13 of which were in the expected direction. Contrary to our expectations, the relationship between the volatility subscale and focus on thought was positive. However, this unexpected finding is not altogether counterintuitive because action-oriented individuals on the volatility dimension are good at maintaining their focus on intention and tasks, and focus on thought involves maintaining feelings and thoughts about a negative event. Arguably, such a shared mechanism may engender this positive relationship. Lastly, the correlations between the ACS-T subscales and affect and personality variables had the expected magnitude and direction.

The difference tests revealed that, as expected, the association of the preoccupation subscale with focus on thought and catastrophizing was stronger than that of hesitation. The difference between the preoccupation and hesitation subscales was not significant for self-blame and acceptance, though it was close to significance for acceptance. Our predictions regarding the difference tests of the affect variables were confirmed for positive affect but not for negative affect. The strength of association between the hesitation subscale and positive affect was significantly greater than that between the preoccupation subscale and positive affect. However, both subscales were related to negative affect at a similar magnitude. There was a stronger association between neuroticism and the preoccupation subscale and between extraversion and the hesitation subscale, in line with predictions.

The results of Study 2 illustrate the cross-validity and construct validity of the ACS-T. In addition to establishing its construct validity by showing the relationship between

ASO and personality, affect, and cognitive variables, the results mostly confirmed prior theorizing (e.g., Baumann et al., 2005; Kuhl, 2000a) about the unique or diverse relationships of the preoccupation and hesitation subscales. Moreover, the direction and magnitude of the relationships were similar for the 36-item and 23-item versions of the ACS-T, which further demonstrates that dropping items did not alter the revised ACS-T's relationships with related constructs drastically.

Study 3

Study 3 examined the relationship between ASO and emotional labor. Specifically, we investigated the relationship of the three dimensions of ASO with surface acting, deep acting, and naturally felt emotions through a single path analytic model controlling for age and gender. We expected that action orientation would be negatively related to individual differences in employing surface and deep acting and positively related to those in expressing naturally felt emotions. We also expected stronger correlations of ASO with surface acting than with deep acting.

Method

Participants and procedure
The sample was 159 teachers (92 women and 67 men) employed in public and private schools in Izmir, Turkey, with a mean age of 36.35 ($SD = 11.64$) years. Of the participants, 86.8% ($N = 138$) had graduated from university and 13.2% ($N = 21$) had a postgraduate degree. They had, on average, 8.95 years ($SD = 9.76$) of tenure. Participants were provided with a link to the questionnaire and informed consent form that they then completed and returned. Approval for the study was obtained from the university ethics board (protocol number: 125-2019).

Measures
Action control. Participants responded to the revised 23-item ACS-T to measure state–action orientation. The alpha

Table 4. The correlations between the variables and the path analysis results.

Variable	Correlations			Path analysis		
	SA	DA	NFE	SA	DA	NFE
Gender[a]	.05	−.15[†]	.03	.10	−.18*	−.03
Age	−.15	−.05	.23**	−.12	−.05	.20**
Preoccupation	−.23**	−.07	.17*	−.14[†]	−.14[†]	.08
Hesitation	−.30***	.10	.27**	−.22*	.18*	.19*
Volatility	−.19*	.07	.20*	−.08	.03	.08
R^2				.14	.06	.13

Note: $N = 159$. Standardized values were reported.
SA: surface acting, DA: deep acting, NFE: naturally felt emotions.
[a]0 = women, 1 = men.
[†]$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$.

reliability scores were .73 for the preoccupation, .82 for the hesitation, and .61 for the volatility subscales.

Emotional labor. Emotional labor was assessed using a scale developed by Diefendorff et al. (2005) and translated into Turkish by Basım and Beğenirbaş (2012). Participants rated their agreement (1 = *strongly disagree*, 5 = *strongly agree*) with items measuring surface acting (seven items, e.g., "I fake the emotions I show when dealing with customers"), deep acting (four items, e.g., "I work hard to feel the emotions that I need to show to customers"), and expression of naturally felt emotions (three items, e.g., "The emotions I express to customers are genuine"). Reliability estimates derived from this study's data were .90 for surface acting, .91 for deep acting, and .84 for naturally felt emotions.

Results and discussion

Table 4 shows the correlations between the ACS-T subscales and emotional labor dimensions. All three subscales were negatively related to surface acting and positively related to naturally felt emotions. They were not, however, significantly related to deep acting. To test whether the ACS-T subscales–surface acting relationships are stronger than the ACS-T subscales–deep acting relationships, we compared the correlations. One-way z-test results revealed that the associations of the ASO with surface acting were stronger than with deep acting for preoccupation, $r_{difference} = .16$, $z = −1.77$, $p = .04$, hesitation, $r_{difference} = .40$, $z = −4.38$, $p < .001$, and volatility $r_{difference} = .26$, $z = −2.76$, $p = .003$.

We also tested the three subscales of the ACS-90 as predictors of surface acting, deep acting, and naturally felt emotions in a single path analysis controlling for age and gender (see Table 4). The hesitation subscale was a significant predictor of surface acting, $\beta = −.22$, $p = .01$, deep acting, $\beta = .18$, $p = .05$, and naturally felt emotions, $\beta = .19$, $p = .04$. The preoccupation subscale marginally predicted surface acting, $\beta = −.14$, $p = .09$, and deep acting, $\beta = −.14$, $p = .09$. The volatility subscale did not predict the emotional labor strategies significantly. It is important to note that the relationship between the hesitation subscale and deep acting was positive, which was not in line with our initial expectations. The positive relationship may be due to the task-related and functional aspects of deep acting (Hülsheger & Schewe, 2011). The hesitation dimension is characterized by

prompt mobilization of necessary resources to complete tasks, especially under demanding situations, which may explain the unexpected positive relationship. However, we remain cautious in our inferences because of the difference between the correlations and path analysis estimates, which may be an indication of suppression (Maassen & Bakker, 2001).

Study 4

Thus far, we have examined the psychometric qualities of the ACS-T and investigated the relationship between ASO and trait emotional labor. However, the theory of action and state orientation emphasizes the dynamic interplay between ASO and situational characteristics. We therefore have good reason to expect that ASO will be related to within-person variations in emotional labor. We investigated this possibility by collecting emotional labor measurements on a daily basis to examine the association between ASO and state emotional labor. In line with Study 3, we expected that action orientation would be negatively related to daily use of surface and deep acting and positively related to the daily expression of naturally felt emotions.

Method

Participants and procedure

The participants were 74 employees (53 women and 21 men) working in government and private organizations in three western provinces of Turkey. They were employed in hospitals (28.4%, $N = 21$), schools (41.9%, $N = 31$), and customer and sales representative jobs (29.7%, $N = 22$). Their mean age was 35.93 ($SD = 8.65$) years. The majority (75.7%, $N = 56$) had an associate's or bachelor's degree, 16.2% ($N = 12$) had postgraduate education, and 8.1% ($N = 6$) had graduated from high school. They had been working in their organizations for an average of 7.16 years ($SD = 6.2$).

We recruited the participants through the personal contacts of the authors. The contacts were given detailed information about the study and asked for their assistance in data collection. They provided lists of employees interested in participating in the study along with their contact information (i.e., e-mail addresses and phone numbers). Those employees were sent an initial online survey link containing the ACS-T and the demographics form. The cover letter of the survey described the data collection process, assured confidentiality, and asked for voluntary agreement to participate in the study. It also instructed the participants to choose a code name and use it every time they accessed the online survey. Approval was obtained from the research ethics board of the university (protocol number: 125-2019). The data collection for the daily survey continued for four workdays. Participants were sent an online survey link containing the emotional labor scale via e-mail or phone message for completion each workday near the end of working hours. Each day at 4:00 pm, a reminder message was sent to all participants, and at 7:00 pm, a message was sent to those who had not filled out the survey. Data were collected from

Table 5. Descriptive statistics, reliability estimates, and correlations among Study 4 variables.

Variable	1	2	3	4	5	6	7	8
1. Gender[a]		−.11	.19**	−.25***	−.13	.07	−.09	.09
2. Age	−.11		.31***	.29***	.06	−.28***	−.16*	.23***
3. Preoccupation	.24*	.28*		.39***	.05	−.34***	−.20**	.33***
4. Hesitation	−.25*	.28*	.33**		.19**	−.38***	−.15*	.22**
5. Volatility	−.15	.07	.04	.15		−.08	.11	.13
6. Surface acting	.03	−.32**	−.41***	−.40***	−.07		.48***	−.41***
7. Deep acting	−.17	−.16	−.23	−.17	.12	.55***		−.04
8. Naturally felt emotions	.07	.26*	.37**	.24*	.15	−.47***	−.05	
Level 1 (day)								
Mean	—	36.51	5.03	5.81	4.58	1.91	2.44	3.68
SD	—	8.78	2.55	2.42	1.45	.87	1.05	1.11
Level 2 (person)								
Mean	—	35.93	4.99	5.81	4.57	1.92	2.42	3.68
SD	—	8.65	2.60	2.31	1.45	.75	.86	.99

Note. $N = 74$, daily responses $= 231$.
[a]$0 =$ women, $1 =$ men. The values above the diagonal show day level (within-person) correlations and the values below the diagonal show the person level (between-person) correlations. The within-person variables were aggregated for the computation of between-person correlations.
*$p < .05$, **$p < .01$, ***$p < .001$.

87 employees; however, data from 13 were unusable due to incomplete or non-matching surveys. We included employees who returned at least two daily surveys, which yielded 231 daily responses with an average cluster size of 3.12.

Measures
Action control. Action-state orientation was measured with the 23-item revised ACS-T. The alpha scores were .77 for preoccupation, .81 for hesitation, and .61 for volatility.

Emotional labor. Emotional labor was assessed with the Diefendorff et al. (2005) scale used in Study 3. The item wordings were adapted to capture the daily use of emotional labor strategies. Participants rated the extent to which they had engaged in surface acting (e.g., "Today, I faked the emotions I showed when dealing with customers"), deep acting (e.g., "Today, I worked hard to feel the emotions that I needed to show to customers"), and expression of naturally felt emotions (e.g., "Today, the emotions I expressed to customers were genuine") that day. Multilevel alpha reliability estimates were computed based on Geldhof et al. (2014). The within-person reliability estimates were .81 for surface acting, .74 for deep acting, and .74 for naturally felt emotions. The between-person reliability estimates were .95 for surface acting, .99 for deep acting, and .99 for naturally felt emotions.

Results and discussion

The within- and between-person means, standard deviations, and correlations among the variables are displayed in Table 5. We conducted multilevel path analysis to account for nested structure of the data and to model associations between day- and person-level variables. Our decision was justified by intra-class correlations (ICCs) of .60, .60, and .64 for surface acting, deep acting, and naturally felt emotions, respectively.

As in Study 3, we estimated the ACS-T subscales as predictors of surface acting, deep acting, and naturally felt emotions in a single model, controlling for age and gender. Age

and gender were not significant predictors of emotional labor strategies. The preoccupation subscale significantly predicted surface acting ($\gamma = -.08$, $SE = .03$, $p = .03$) and naturally felt emotions ($\gamma = .10$, $SE = .05$, $p = .04$) but did not predict deep acting ($\gamma = -.04$, $SE = .04$, $p = .35$). The hesitation subscale significantly predicted surface acting ($\gamma = -.09$, $SE = .04$, $p = .02$) but not deep acting ($\gamma = -.04$, $SE = .05$, $p = .37$) or naturally felt emotions ($\gamma = .06$, $SE = .05$, $p = .27$). The volatility subscale did not significantly predict surface acting ($\gamma = .01$, $SE = .05$, $p = .96$), deep acting ($\gamma = .03$, $SE = .07$, $p = .67$), or naturally felt emotions ($\gamma = .05$, $SE = .07$, $p = .52$). All of the significant relationships were in the expected direction. The overall model explained 33%, 13%, and 22% of the variance in surface acting, deep acting, and naturally felt emotions, respectively.

General discussion

The current study aimed to test the psychometric qualities of the ACS-T and the relationship between ASO and emotional labor. Studies 1 and 2 showed that ACS-T displays good psychometric qualities. Studies 3 and 4 provided initial support for a relationship between ASO and emotional labor strategies measured as either a trait or a state construct.

Psychometric properties of the Turkish form of the ACS-90

The CFA results showed that the 23-item three-factor ACS-T was the only factor structure of four alternatives that met the criteria described in Hu and Bentler (1999). These results resonate with past research (Diefendorff et al., 2000; Kuhl, 1994b; Papantoniou et al., 2010) showing that the three-factor structure provides a better fit to the data than the alternative models. The results are also consistent with findings that some items of the ACS-90 perform poorly (Diefendorff et al., 2000; Papantoniou et al., 2010). One reason for the low factor loadings may be the different contexts depicted in each item of the ACS-90, which may introduce unaccounted-for variance due to context-related characteristics. This may also explain the low alpha and categorical

omega values obtained for the volatility subscale. However, as Kuhl (1994b) pointed out, construct-related diversity—reflected through different contexts—is an important aspect of the ACS-90 subscales. Indeed, ensuring adequate diversity in the behavioral manifestations of ASO was one of the primary endeavors of ACS-90 scale development. For this reason, even though we dropped items for the sake of factorial validity, we opted to report the psychometric information for the 36-item ACS-T and investigated the means, correlations, and reliability estimates of both the 36-item and the revised 23-item ACS-T. The strong correlations between the subscales of the 36-item and 23-item ACS-T indicate that a significant overlap remains between the two scales despite the item deletion. Moreover, albeit slightly lower for the revised subscales, the difference between the reliability estimates of the 36-item and 23-item ACS-T subscales was negligible, which demonstrates that dropping items did not adversely affect the internal consistency of the subscales.

Study 2 confirmed the three-factor model in a different sample and bore out most of our conceptual expectations regarding the ACS-T. Specifically, ACS-T subscales had at most modest correlations with achievement motives and the personality traits of extraversion and neuroticism, which indicated that they are related but distinct constructs. Our predictions regarding significant correlations of the ACS-T subscales with cognitive failures, cognitive emotion regulation, and affect were mostly confirmed. The results indicated that the ACS-T has adequate convergent validity. Moreover, the relationships between the 36-item ACS-T and relevant constructs were similar to those of the 23-item ACS-T, which further confirmed the high overlap between the two versions. Extending past research that examined the psychometric qualities of the ACS-90, we investigated whether the preoccupation and hesitation subscales are differentially associated with cognitive emotion regulation dimensions, positive and negative affect, and neuroticism and extraversion. The results were largely in line with predictions. As expected, preoccupation had a stronger relationship than did hesitation with the focus on thought and catastrophizing dimensions of the CERQ and neuroticism. Hesitation had a stronger association than did preoccupation with positive affect and extraversion. The one noteworthy exception was the insignificant difference between the preoccupation–negative affect and hesitation–negative affect relationships. Altogether, these results support the scale's construct validity by showing that theorized conceptual differences between the preoccupation and hesitation dimensions were largely reflected in their relationships with relevant variables.

The relationship between ASO and emotional labor

Our findings showed that the three subscales of the ACS-T were correlated negatively with trait surface acting and positively with trait naturally felt emotions. However, they were not significantly correlated with trait deep acting. The correlation comparisons similarly revealed that the three ACS-T subscales had stronger correlations with surface acting than with deep acting. These findings resonate with past research

arguing that the positive and negative aspects of deep acting cancel each other out and lead to nonsignificant or small correlations with related variables (e.g., Bono & Vey, 2005). The path analysis results revealed that when the three subscales simultaneously predicted the three emotional labor strategies controlling for age and gender, the hesitation subscale emerged as the only significant predictor of the three emotional labor strategies. These findings were consistent with Diefendorff et al. (2000), who found that, among the three ACS-90 subscales, hesitation was the strongest predictor of work-related outcomes such as job performance and organizational citizenship behavior.

Study 4 investigated the association between ASO and state emotional labor. The results showed that preoccupation predicted surface acting and naturally felt emotions and that hesitation predicted surface acting. A comparison of the results of Studies 3 and 4 indicates that being action-oriented on preoccupation may be relevant to daily emotional labor. Action-oriented individuals on the preoccupation dimension detach themselves from goal-impeding processes such as ruminative thoughts or negative mood states more easily than their state-oriented counterparts do. Such an ability seems to be particularly related to detaching oneself from daily occurrences of negative thoughts and emotions so that one can meet the emotion display demands of an organization, failure at which necessitates using surface acting.

Unlike preoccupation and hesitation, volatility was not associated with emotional labor, particularly when all three ASO dimensions predicted emotional labor. These results suggest that emotional labor is more strongly associated with ASO dimensions that define action-oriented processes before goal initiation rather than processes operating after goal initiation. In other words, volatility, defined as goal persistence to completion, is not as strongly involved in emotional labor as preoccupation and hesitation. One explanation for this could be that being action-oriented on the volatility invites costs that cancel out its beneficial influence in an emotional labor context. Individuals who are action-oriented on the volatility dimension are better at shielding a task at hand from alternative goals or activities compared to state-oriented people. However, such strong goal shielding may also diminish a person's ability to flexibly switch between different cognitive states. Goschke and Bolte (2018) referred to this as the *shielding-shifting dilemma* and argued that strong goal shielding has the cost of reducing cognitive flexibility. Lack of cognitive flexibility may manifest as a difficulty in switching between different strategies to best handle a situation (e.g., an uncivil customer interaction). Thus, even though those who are action-oriented on the volatility dimension persist toward a goal (e.g., successfully handling an uncivil customer), they do so at a cost to their cognitive flexibility, which for example may result in sticking to an ineffective strategy (e.g., surface acting). A second and somewhat simpler explanation is that, as theorized, affect regulation plays a role in the preoccupation and hesitation but not the volatility. Since emotion regulation is also involved in emotional labor, this shared involvement

may explain why the preoccupation and hesitation dimensions are related to emotional labor and the volatility dimension is not.

Strengths, limitations, and suggestions for future research

The current study is the first to examine the psychometric properties of the ACS-90 in Turkish samples. The ACS-T is shown to have good validity and reliability across student and non-student samples. Moreover, to our best knowledge, this is also the first study to investigate the relationship between ASO and trait and state emotional labor.

Nevertheless, several limitations should be noted. First, all four studies recruited participants through convenience sampling. Studies with systematic sampling procedures would help to rule out the possible issues related to sampling characteristics. The difference in magnitude between Study 3 and Study 4 in some correlations of the ACS-T subscales with emotional labor strategies reinforces this necessity. It is not possible to state with certainty whether this difference is due to participants from different occupations participating in the studies or the conceptualization of emotional labor as a trait and state variable. Second, all the measures were self-report, which may pose the threat of spurious correlations between variables due to common method bias. Third, in Studies 3 and 4, we investigated the relationship between ASO and emotional labor by controlling for age and gender only. Future studies may investigate the incremental prediction of ASO over known individual difference antecedents of emotional labor such as extraversion, agreeableness, or self-monitoring (Grandey & Gabriel, 2015). An avenue for future research would be examining ASO as a moderator of the relationships of emotional labor with antecedents and outcomes; indeed, ASO has been theorized and conceptualized as a moderator variable in past research (e.g., Jostmann & Koole, 2006; van Dijke et al., 2013). Lastly, an interesting research area would be examining within-person variability in ASO. Although ASO emerged as a relatively stable individual difference variable, the test-retest reliability estimates indicated that considerable variation remains unaccounted for in the three dimensions of ASO. This finding raises the possibility that there is meaningful within-person variability in ASO. Diefendorff et al. (2018) argued for such variability based on experimental research that successfully manipulated the ASO levels of participants and studies that documented within-person variability in constructs that have similarities with ASO. Even though Study 4 in the current research employed daily data collection, ASO was measured as an individual difference variable. We consider this a limitation of current research and echo previous calls (e.g., Diefendorff et al., 2018) for research investigating within-person variability in ASO.

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Data availability statement

The data that support the findings of this study are available from the corresponding author, [M.P.], upon reasonable request.

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