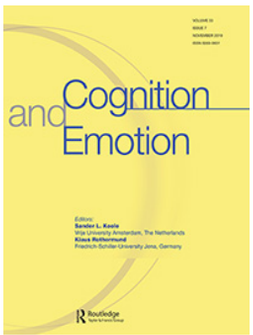

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BRIEF ARTICLE

State emotional clarity and attention to emotion: a naturalistic examination of their associations with each other, affect, and context

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ABSTRACT

Despite emotional clarity and attention to emotion being dynamic in nature, research has largely focused on their trait forms. We examined the association between state and trait forms of these two constructs, and how they are related to affect intensity and two contextual variables: Social context and significant event occurrence. Seventy-nine adults recruited from the community reported eight times a day for a week on the extent to which they were clear about their emotions, attended to their emotions, levels of affect intensity, the number of people with whom they were interacting, and whether a significant event had occurred. State clarity and attention were positively associated, demonstrating a moderate relation similar to that of their trait forms. Trait and state attention, but not trait and state clarity, were significantly positively associated. Positive and negative affect were quadratically associated with clarity and attention, with the highest levels of affect intensity reported at high levels of clarity and attention. Clarity and attention were positively associated with increasing numbers of people with whom people were interacting. Attention and clarity were elevated when significant events occurred – especially during positive events. We discuss the findings in the context of functional adaptation theories of emotion.

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Emotional awareness; emotional clarity; attention to emotion; context; social

Theory and research on emotional awareness, alexithymia, and mood awareness converges to describe two primary underlying dimensions of these constructs: Emotional clarity and attention to emotion (Boden & Thompson, 2015; 2017; Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). Emotional clarity (hereafter labelled "clarity") is the extent to which people unambiguously identify, label, and characterise their own emotions. Attention to emotions (hereafter labeled "attention") is the extent to which people attend to and value their emotions. Clarity and attention are central to models of adaptation and psychopathology (e.g. Berenbaum, Raghavan, Le, Vernon, & Gomez, 2003) and are often linked to adaptation and psychopathology via their influences on emotion regulation (Barrett & Gross, 2001; Gross, 2015). For example, information provided by understanding one's emotions is associated with depression via paths through reappraisal and acceptance (Boden & Thompson, 2015).

The rich literature on clarity and attention has focused almost exclusively on their trait forms. A meta-analysis demonstrated a moderate, positive association between clarity and attention (summary effect = .34; Boden & Thompson, 2017), supporting theory positing that trait clarity and attention are distinct yet related constructs (Gohm & Clore, 2002; Salovey et al., 1995). Yet, clarity and attention (Thompson et al., 2011) are dynamic constructs that temporally vary when measured at the state level (Arndt, Lischetzke, Crayen, & Eid, 2018; Thompson et al., 2011; 2015). Naturalistic research is needed to examine relations between state clarity and attention, as well as the relations between these constructs and contemporaneous affect. Using ecological momentary assessment (EMA), we examined associations between *state* clarity and attention and the extent to which state and trait measures of these constructs are associated with each other. Given theorising and empirical

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support for the role of clarity and attention in emotion regulation and that most research examining clarity and attention utilises trait measures, we also examined how state clarity and attention are associated with affect momentarily. Finally, we explored how clarity and attention are related to contextual factors: Participants' social context and occurrence of a significant events.

Although it may be reasonable to expect state and trait measures of the same construct would be highly associated, real-time and retrospective reports of emotion rely on different types of information and knowledge (e.g. experiential information, episodic memory, identity-related beliefs; see Robinson & Clore, 2002, for a comprehensive discussion). Knowing the extent to which state and trait measures of these constructs are associated can inform the numerous studies that used trait measures of these constructs, while providing a basis for theorising and research regarding the development of meta-emotional knowledge from ongoing emotional experience (e.g. see Boden, Thompson, Dizén, Berenbaum, & Baker, 2013).

We examined these constructs' relations with a dynamic dimension of emotion, affect intensity. Trait clarity is unrelated to affect intensity (Boden et al., 2013; Gohm & Clore, 2002; Thompson, Dizén, & Berenbaum, 2009). In contrast, state clarity is positively associated with the intensity of negative and positive affect quadratically (Arndt et al., 2018; Thompson et al., 2015), such that people exhibit higher clarity when affect intensity is either low or high but not moderate (Arndt et al., 2018). Findings in trait and state research on attention and affect intensity have been more consistent than research on clarity. Trait attention has been found to be associated with higher affect intensity (Gohm & Clore, 2002; Thompson et al., 2009). Further, state attention was contemporaneously associated with experiencing higher intensity of both negative and positive affect (Thompson et al., 2011). However, research is limited to two studies, one which included a student sample (Arndt et al., 2018) and another a clinical sample (Thompson et al., 2015). Further, only linear associations between affect and attention have been examined (Thompson et al., 2011). Thus, in a community sample, we examine quadratic associations between these two constructs and affect intensity.

Beyond elucidating how clarity and attention are related to affect, theorists and researchers have increasingly stressed the importance of contextual factors in relation to emotional experience (e.g. Gross, 2015). We identified two contextual factors that we expect will be associated with clarity and attention: social context and significant events. Although our analyses on context are exploratory, we chose them for several reasons. At a basic level, humans are social in nature, and relationships are integral to well-being. A long history of research documents that social interactions are related to emotion elicitation. Further, as noted above, clarity and attention are key influences on emotion regulation (e.g. Barrett & Gross, 2001), which is intimately related to social functioning and relationships. To assess social context, participants reported the number of people with whom they were interacting. In terms of naturalistic studies, participants were interacting with at least one person between 34% and 58% of the time (Torquati & Raffaelli, 2004), and a majority of significant daily events include interactions with various people (e.g. Bylsma, Taylor-Clift, & Rottenberg, 2011).

Seminal theories posit that emotions serve an adaptive function by coordinating bodily responses to events related to people's needs, values, and goals (Lazarus, 1991). Emotions guide attention to internal or external stimuli that are important to one's concerns and have implications for well-being and survival (Clore & Gasper, 2000). People attempt to understand emotions, which provides the opportunity to take action that increases their well-being (Wilson & Gilbert, 2005). Consistent with these theories, we hypothesise that significant events will often elicit emotion because of their relation to the needs, goals, and concerns of a person. In this sense, the emotion response is an indicator of the significance of the event. We think that events capture people's attention, and attention is focused on both the event and its related emotion, leading to increased understanding and higher clarity. Thus, we hypothesise that clarity and attention will be higher within the context of negative and positive significant events.

In this study, we used EMA to assess state clarity and attention in a sample of unselected adults recruited from the community. Understanding emotion dynamics in an unselected sample is important in providing a normative reference. We predict that state clarity and attention would be positively associated contemporaneously and state and trait measures of clarity and of attention would be associated to a moderate degree. We also sought to replicate research on clarity and attention and affect, additionally investigating whether state attention and affect are quadratically related. Finally, we

explored the associations between clarity and attention with two contextual variables: Social context and significant events.

Method

Participants and procedure

Seventy-nine adults recruited from the greater St. Louis region (58.2% female; $Mean_{Age} = 39.01$, $SD_{Age} = 14.45$, $Range_{Age} = 20–71$ years) participated in a study examining people's everyday emotional experiences (Bailen, Wu, & Thompson, 2018; Gilbert, Tonge, & Thompson, 2019). Individuals were recruited by advertisements placed at local businesses and online (e.g. Craigslist) and through Volunteers for Health, a participant registry operated by the Washington University in St. Louis Medical School. Ethnicity/race of the sample was as follows: 65.8% White (3.8% Hispanic), 21.5% Black, 7.6% biracial, 3.8% Asian, and 1.3% Middle Eastern. All participants were U.S. citizens, and English was their first language. Most participants (75.9%) had graduated with a bachelor's degree or higher, and were employed part or full-time (86.1%). An additional nine participants' data were not available due to technical problems (n = 7) or because they dropped out of the study ($n = 2$).

Our sample size and survey frequency provides a power of greater than .80 for a level-1 fixed effect but may be provide a power less than .80 to detect a level-2 continuous fixed effect (Bell, Morgan, Schoeneberger, Kromrey, & Ferron, 2014). With regard to the effects of sample size on estimation accuracy, our sample size was adequate; Maas and Hox (2005) found that only a small sample size ($n < 50$) at Level 2 results in biased estimates; importantly, they found that other factors (e.g. Level-1 sample size, ICCs) did not result in biased estimates (Maas & Hox, 2005).

Participants completed two laboratory sessions that occurred approximately eight days apart ($M = 9.5$ days, SD = 3.1days, range = 8–18 days), between which they completed an EMA protocol on an iOS device. Participants chose the 12-hour period in which they wanted to be surveyed, were instructed on the protocol, and completed a practice survey. Starting the day after the first session, participants received push-notifications eight times a day for seven days based on a stratified random interval scheme. Participants had ten minutes to begin the survey. Mean and percentage of surveys completed were 40.2 (SD = 11.9; range = 11–56), and 72.4% (SD = 20.8%; range = 20–100%), respectively. At the second session participants' EMA data were downloaded and participants were financially compensated. Participants were paid $10/hour for the laboratory sessions, $35 for the EMA portion, and received a $5 bonus if they completed at least 90% of surveys. A total of 17 participants (21.5%) received the bonus. The research protocol was approved by a university institutional review board.

Materials

State emotional awareness

At each survey participants used a 5-point scale (1 = *not at all*, 5 = *a great deal*) to rate their momentary emotional clarity and attention to emotion. The items were adapted from the highest-loading item on the trait Clarity of Feelings ("At the time of the beep, I was clear about my feelings") and Attention to Feelings subscales ("At the time of the beep, I was paying attention to how I was feeling"), respectively, of the Trait Meta-Mood Scale (Salovey et al., 1995). The attention item was validated in previous EMA research (Thompson et al., 2011). The intra-class correlation (ICC) for clarity was .53, indicating that 53% of the total variability in clarity was between persons and 47% was within persons. ICC for attention was .45. The means of state clarity and attention were 3.09 ($SD_{Within} = 1.34$, $SD_{Between} = 1.00$) and 2.09 ($SD_{Within} = 1.22$, $SD_{Between} = 0.83$), respectively.

Trait emotional awareness

To assess trait levels of clarity and attention, participants completed items selected from the Trait Meta-Mood Scale and the Toronto Alexithymia Scale-20 based on results from a multidimensional scaling and confirmatory factor analysis by Palmieri, Boden, and Berenbaum (2009). Participants indicated the extent to which they agreed with 13 items assessing clarity and ten items assessing attention using a 5-point scale (1 = strongly disagree, 5 = strongly agree). Internal consistency (Cronbach's alpha) of the scales were as follows: clarity = .90 and attention = .84. The means of trait emotional clarity and attention to emotion were 3.84 (SD = 0.65) and 4.00 (SD = 0.58), respectively.

Affect intensity

At each EMA survey, participants used a 5-point scale (0 = *not at all*, 4 = *extremely*) to report the extent to which they felt a series of emotions ("I feel [emotion]

right now"). Mean levels of positive affect (PA; i.e. happy, calm, excited, relaxed, enthusiastic, content) and negative affect (NA; i.e. frustrated, hostile, sluggish, sad, disappointed, dull, nervous) were computed for each survey. Emotions included low and high arousal emotions of the affective circumplex. The ICCs for negative and positive affect were .48 and .51, respectively. The means of state negative and positive affect were 0.45 ($SD_{within} = 0.56$, $SD_{Between} = 0.40$) and 1.62 ($SD_{Within} = 0.90$, $SD_{Between} = 0.68$), respectively.

Social

A single question was used to assess the number of people participants were with at each EMA survey ("At the time of the beep, were you interacting with other people?"). Participants chose a response on a 5-point scale (0 = *No*, 1 = *one person*, 2 = *two people*, 3 = *three to five people*, 4 = *more than five people*). The mean of social context was 0.70 ($SD_{Within} = 1.00$, $SD_{Between} = 0.35$).

Significant event

To assess whether a significant event occurred, at each EMA survey participants answered yes or no to "Was there a significant event since the last beep?". If participants chose yes, they rated the event on various dimensions, including the pleasantness of the event (i.e. "Please rate how negative or positive this event was for you."). Participants moved a slider along a visual analog scale with anchors of unpleasant to pleasant (1 = *most unpleasant*; 100 = *most pleasant*). Scores between 1–50 were recoded to indicate a *negative event*, and scores between 51–100 were recoded to indicate a *positive event*. The mean percentages of completed prompts for which a significant positive and negative event occurred 2.9% (SD = 4.3%) and 2.4% (SD = 3.4%), respectively.

Analytical overview

Data are hierarchically nested with prompts nested within participants. Using the lme4 and multcomp packages implemented by *R*, we conducted a series of generalised linear mixed models (GLMM), which estimate within- and between-participant effects while accounting for missing data, varying time intervals between surveys, and non-independence of data points (Snijders & Bosker, 1999), We estimated pseudo R^2 using the method proposed by Snijders and Bosker (1999). For all models with Leve1 1 predictors, we group-mean/person-centered all Level 1 predictors. For models with affect and social context variables, we included these variables as linear and quadratic predictors at Level 1; whereas significant event served as a linear predictor only at Level 1.

For our main analyses, which examined associations between state forms of the two emotional awareness facets, we predicted state clarity from state attention and then predicted state attention from state clarity. Equations 1a-1c are provided for the model that predicted state clarity from state attention.

Level 1 Model

$$\text{State clarity}_{ij} = \beta_{0j} + \beta_{1j}*(\text{state attention}_{ij}) + r_{ij} \quad (1a)$$

Level 2 Model

$$\beta_{0j} = \gamma_{00} + u_{0j} \quad (1b)$$

$$\beta_{1j} = \gamma_{10} + u_{1j} \quad (1c)$$

State clarity$_{ij}$ represents state clarity for participant$_j$ at survey$_i$. At Level 1 (Equation 1(a)), β_{0j} represents each participant's mean of clarity at the person mean of attention; β_{1j} represents the change in clarity per unit change in attention for each participant. At Level 2, γ_{00} (Equation 1(b)) represents the grand mean of clarity; γ_{10} (Equation 1(c)) represents the change in clarity for each unit change in attention to emotion for the entire sample.

In the models in which we examine associations between state and trait forms of clarity and attention, we predicted state emotional awareness variables from their trait forms (i.e. Level 2). Trait variables (e.g., trait clarity) were grand mean centered. Equations 2a and 2b are provided for the model including the state and trait clarity.

Level-1 Model

$$\text{State clarity}_{ij} = \beta_{0j} + r_{ij} \quad (2a)$$

Level-2 Model

$$\beta_{0j} = \gamma_{00} + \gamma_{01*}(\text{trait clarity}_j) + u_{0j} \quad (2b)$$

State clarity$_{ij}$ represents clarity for participant$_j$ at survey$_i$. At Level 1, β_{0j} represents each person's mean state clarity across their surveys. At Level 2, γ_{00} represents the grand mean of state clarity at the grand mean of trait clarity, and γ_{01} represents the change in state clarity for each unit change in trait clarity.

Results

Results from analyses examining clarity and attention are displayed in Table 1. As demonstrated by significant slope parameters, attention and clarity were positively associated regardless of which variable was the criterion (Analysis 1 and 2). Higher levels of clarity were on average associated with higher levels of attention and vice versa, and these effects were small-to-moderate and significant. Higher trait clarity was associated with higher state clarity to a negligible and non-significant degree (Analysis 3). Higher trait attention was significantly associated with higher state attention to a small and positive degree (Analysis 4).[1]

Analyses 5 and 6 demonstrated that both negative and positive affect were significantly quadratically associated with clarity and attention, with U-shaped patterns characterising their associations for individual participants on average (see Figure 1, Panels A through D). For clarity and negative affect (Panel A) and attention and positive affect (Panel D), both lower and higher versus moderate levels of affect were associated with higher levels of clarity and attention. A U-shaped relation also characterised the relations between clarity and positive affect (Panel C) and attention and negative affect (Panel B), though in both cases higher versus lower or moderate levels of affect were associated with higher levels of clarity and attention.

Linear but not quadratic slope parameters for relations between social and clarity and attention were significant (Analysis 7). A higher number of people in a social encounter was associated with higher levels of clarity and attention.

Slope parameters were positive and significant for positive significant events predicting clarity and attention, and negative significant events predicting attention but not clarity (Analysis 8 and 9). Significant positive events were associated with higher levels of clarity, and significant positive and negative events were associated with higher levels of attention.

Discussion

Theorists have consistently posited that emotional awareness is integral to well-being and emotion regulation (e.g. Barrett & Gross, 2001). Despite emotional awareness and its facets of clarity and attention

Table 1. Results of generalised linear mixed models.

	State clarity				State attention			
	Est	(SE)	*Z*	R^2	Est	(SE)	*Z*	R^2
Contemporaneous analyses								
(1) Intercept γ00	3.09***	(.11)	27.38	.24				
State attention slope γ10	.41***	(.04)	9.29					
(2) Intercept γ00					2.05***	(.09)	21.85	.11
State clarity slope γ10					.36***	(.04)	8.36	
Trait analyses								
(3) Intercept γ00	3.09***	(.11)	27.29	.00				
Trait clarity slope γ01	.10	(.18)	.60					
(4) Intercept γ00					2.05***	(.09)	23.47	.06
Trait attention slope γ01					.54***	(.15)	3.60	
Contemporaneous analyses								
(5) Intercept γ00	3.04***	(.11)	29.91	.05	2.01***	(.09)	21.19	.08
Negative affect slope γ10	.02	(.09)	.23		.43***	(.08)	5.69	
Negative affect slope^2 γ20	.27***	(.08)	3.59		.29***	(.08)	3.88	
(6) Intercept γ00	3.00***	(.12)	25.86	.10	1.91***	(.09)	20.58	.01
Positive affect slope γ10	.14**	(.05)	2.64		−.14**	(.05)	−2.60	
Positive affect slope^2 γ20	.24***	(.04)	5.98		.32***	(.04)	7.79	
(7) Intercept γ00	3.11***	(.11)	27.42	.01	2.08***	(.10)	21.57	.05
Social slope γ10	.07*	(.03)	2.05		.07*	(.03)	2.20	
Social slope^2 γ20	−.02	(.02)	−1.30		−.03	(.05)	−1.95	
(8) Intercept γ00	3.08***	(.11)	27.10	.05	2.04***	(.09)	21.67	.07
Negative event slope γ10	.29	(.15)	1.92		.60***	(.17)	3.52	
(9) Intercept γ00	3.08***	(.11)	27.13	.03	2.03***	(.09)	21.44	.09
Positive event slope γ10	.32*	(.14)	2.31		.31*	(.13)	2.46	

Note: attention = attention to emotion, clarity = emotional clarity. R^2 = pseudo-R^2 as proposed by Snijders and Bosker (1999, pp. 102–103).
*$p < .01$.
**$p < .01$.
***$p < .001$.

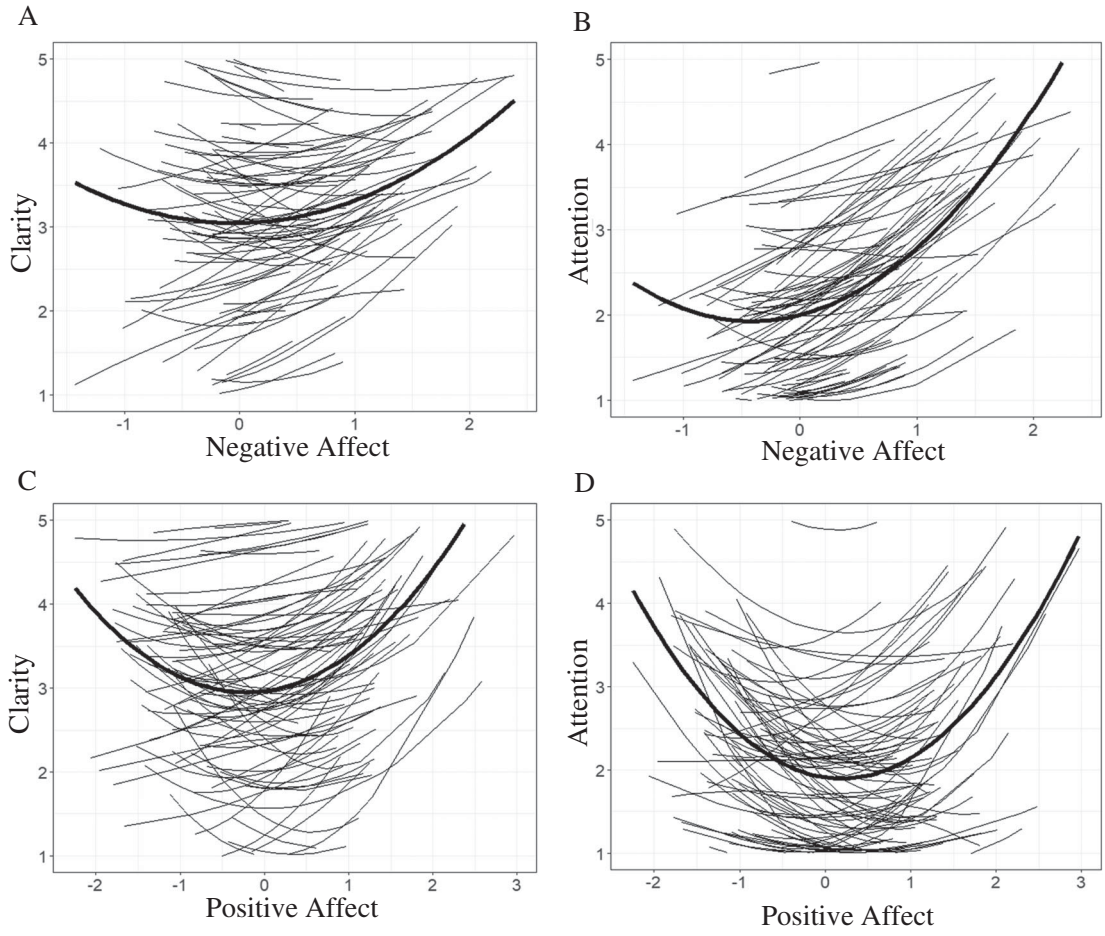

Figure 1. Depiction of quadratic associations between emotional awareness facets and group-/person-centered negative and positive affect, which served as dependent variables in related GLMM. Thin lines depict fitted intra-individual relations, and represent random effects. Bold lines depict smoothed, fitted quadratic curves, and represent the mean effect across all participants and time-points.

being dynamic in nature, empirical work has largely focused on *trait* versions of facets of emotional awareness. Our central goal was to test the associations between *state* clarity and attention. Secondarily, we examined associations between state and trait measures of clarity and attention. Recognising the importance of contextual factors in relation to emotional experience (Gross, 2015), we also investigated how the constructs are related to affect intensity and two contextual variables: Social context and significant event occurrence.

We found that state clarity and attention were positively associated to a moderate degree, which is consistent with their trait forms (see Boden & Thompson, 2017) and supports theory that they are independent, yet related constructs. Thus, clarity and attention are associated both across participants and within individual participants across time, on average. We note that numerous studies, including the current study, have found small, no, or negative association between trait clarity and attention. We posit that multiple moderators influence the association between clarity and attention, in state and/or trait forms, as does the assessment method(s) and measurement instruments (Boden & Thompson, 2017). Regardless, our results suggest that it is important for researchers to examine these constructs individually, while measuring and testing potential moderators.

Trait and state clarity were associated to a limited degree, as were trait and state attention. Perhaps the strength of these associations is not surprising since real-time and retrospective reports of emotion are based on different realms of information and knowledge (Robinson & Clore, 2002). We think it is

important to highlight that trait attention was associated with state attention to a small and significant degree (i.e. trait attention accounted for 6% of state attention variance), whereas trait clarity was associated with state clarity to a negligible and non-significant degree (trait clarity accounted for 0% of state clarity variance). These associations might be stronger for attention than clarity because judgment of attention is potentially more easily ascertained from episodic memory than is clarity. Accurate judgment regarding clarity conceivably requires remembering more details of emotional episodes (e.g. type of emotion experience, source of emotion, consequences of emotional episode) than does attention (e.g. whether emotion was voluntarily attended to). Furthermore, trait clarity versus attention may be more subject to influence by non-emotional factors (e.g. identity-related beliefs), which provide for a stable judgment even as the momentary experience of clarity varies. Although additional studies are needed, our results demonstrate the importance of assessing emotional awareness, especially clarity, in real-time in addition to or rather than only using trait measures.

With regard to negative affect, clarity and attention were highest when levels of negative affect were high. Similarly, clarity was highest when levels of positive affect were high. However, attention was highest when positive affect was low and high (versus moderate). Examination of individual participant change curves (see grey lines in Figure 1) revealed substantial variability in associations between clarity and attention and affect (esp. positive affect). Additionally, variability in the association between negative affect and clarity and attention is greater at lower intensity of negative affect. These results extend existing research using trait (Gohm & Clore, 2002; Thompson et al., 2009) and indirect (Arndt et al., 2018; Thompson et al., 2015) measures of these constructs. We note the possibility that average PA and NA scores may not characterise participants who, within a given domain, tend to experience high levels of some (e.g. hostile), but not other emotions (e.g. sad). Future research could examine clarity and attention in relation to specific types of emotions, especially among those who tend to experience high and low levels of those emotions.

We interpret these results in light of theories positing that emotions as responses to events that are relevant to the needs, goals, concerns and of the person (e.g. Lazarus, 1991). Higher intensity of emotions (especially negative affect) may be attended to and understood (i.e. as manifested as high clarity) because they provide a clear, unambiguous signal of the presence of stimuli that is relevant to well-being and survival. Because they lack such a clear, unambiguous signal, low magnitude/intensity emotions may be attended to for the purpose of understanding their relevance to well-being and survival. Our results stand in contrast to research finding no relation between trait clarity and affect (Boden et al., 2013; Gohm & Clore, 2002; Thompson et al., 2009). Additional research utilising state assessment and experimental methods is needed to examine when and under which conditions affect is attended to and understood (in terms of both intention/motivation to understand and accuracy of understanding). Such research can inform both basic theory and research on affect, emotional awareness, alexithymia, and emotion regulation.

With regard to context, clarity and attention were generally associated with social contexts and contexts in which a significant event occurred, demonstrating a small but significant positive association between clarity and attention and the presence of people. These findings are consistent with research that shows that social interactions contribute to emotions, and significant events often elicit emotions and include others (e.g. Bylsma et al., 2011). Clarity may be higher around others because people expend effort to understand emotional information that is useful in social interactions. Similarly, people may attend to emotions around other people to obtain information that can help guide social interaction. That is, to increase adaptation, participants are likely try to make sense of events and emotions (e.g. Lazarus, 1991).

There may be qualitative differences in the settings or activities people engage in based on the number of people with whom they interacting. For example, a common situation with larger groups involves watching sports. In these types of situations, people's emotions will be more apparent (e.g. anger at a bad call by the referee) than when considering more personal, complicated issues in smaller groups or alone. As groups get larger, each individual talks less on average (e.g. Dunbar, Duncan, & Nettle, 1995) and may discuss things in more general terms (e.g. "The kids are good", "Susan got a promotion"). In fact, people self-disclose less intimate information in larger versus smaller groups (Solano & Dunnam, 1985). Even when focusing on their own emotions

alone or among a few others, people may report less clarity because they are considering emotions in a more nuanced and complicated manner. However, the reasons why clarity and the number of people with whom someone is interacting are associated needs to be examined empirically in future work.

Our analyses regarding social context were exploratory and provided new and unique findings. A priority of research in this area should include replication, potentially in conjunction with tests of mechanisms. Naturalistic studies and experimental studies in which aspects of social interactions such as group size and what is discussed are manipulated will be especially useful. Vogel, Ram, Conroy, Pincus, and Gerstorf (2017) highlight several aspects of social context that are associated with affect (e.g. people's relations to each other) and will be important avenues for future research. Furthermore, participants rated social context using an ordinal scale. Future research should utilise a true count to represent the number of people with whom someone is interacting.

Significant events (and their associated emotions) potentially indicate something of relevance to participants' needs, goals, and concerns. Clarity was significantly associated with positive, but not negative, events, which provides initial evidence that participants were more successful at making sense of positive events. Higher levels of attention were associated with the occurrence of positive and negative events. Some of the variance shared between negative and positive event and clarity and attention is captured by affect intensity and the number of people engaged in a social interaction with a given person. Naturalistic studies can elucidate how and when significant events are associated with clarity and attention. Such studies will benefit from directly assessing contextual and other factors that contribute to an event being deemed significant, including the affect that occurs in such events.

Several limitations should be kept in mind when interpreting our results. Although we used EMA, we assessed all constructs using direct, self-reports, which are prone to bias (Robinson & Clore, 2002). However, our results converge with those of existing research using indirect measures (e.g. Thompson et al., 2015), increasing our confidence of their validity. Because the EMA protocol was only seven days, we could not examine the relations between clarity and attention and other dimensions of events, such as life domain (e.g. personal, achievement). Finally, we examined the occurrence at the momentary level, so our results do not generalise to major life events that are more chronic or ongoing (e.g. divorce).

The importance of being aware of one's own emotions has taken a firm hold in popular thinking (e.g. Chernis & Goleman, 2001). It is now widely assumed that clarity and attention influence how people manage the vicissitudes of relationships, careers, and life more broadly, and are associated with happiness and well-being, distress and psychopathology (e.g. Gohm & Clore, 2002; Palmer, Donaldson, & Stough, 2002; Turk, Heimberg, Luterek, Mennin, & Fresco, 2005). Our results can provide a basis for future research that can explicate how and why clarity and attention are associated with emotion dynamics and emotion regulation, and through this, well-being and psychopathology (e.g. Berenbaum et al., 2003; Boden & Thompson, 2015; Gross & Jazaieri, 2014; Kring & Sloan, 2009).

Note

1. The association between trait clarity and trait attention (r (79) = .11, p = .34), fell within the range found by Boden and Thompson (2015).

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