Thematic Trajectory Analysis: A Temporal Method for Analysing Dynamic Qualitative Data

ABSTRACT

This paper introduces a novel, temporally sensitive analytical method for qualitative researchers. This approach is simultaneously timely and necessary given increasing recognition of the fundamental, yet curiously neglected, part of organisational life and scholarship. As a result of this recognition, research designs considering temporality have substantially increased over the past decade. However, while methods for qualitative *data collection* using longitudinal and 'shortitudinal' designs, in particular qualitative diary methods, have become increasingly common, analytical methods capable of fully exploiting the temporal nature of the data collected have arguably lagged behind their quantitative counter-parts, where we see marked progression in analytical methods and procedures. In this paper, we argue that this lack of progression in approaches for analysing such data hinders our knowledge and theoretical development when it comes to incorporating temporality, particularly for those seeking to embed temporality in their exploration of phenomena at individual-/micro-levels. We respond to these challenges by introducing a novel, step-by-step analytical approach that facilitates rigorous incorporation of temporality into the analysis and theorisation of micro-level qualitative data, termed Thematic Trajectory Analysis (TTA).

Keywords: Qualitative methodology, Diary studies, Temporality, Work-family conflict, Workplace mistreatment

The importance of time and temporality in how we theorise and attempt to understand organisational life has become a central concern for organisational researchers over the past decade, evidenced by numerous calls to better account for temporal dynamics in both the execution and theorising of organisational research (e.g. Spector & Meier, 2014; Vantilborgh et al., 2018), and by the substantial increase in temporally-sensitive research designs (e.g. Jansen & Shipp, 2019; Schecter et al., 2018). Here however, we argue that there are asymmetries in this progression, hindering a diversity of scholarship in this domain:

While there have been a range of analytical methods that permit the incorporation of time and temporality these developments have largely been quantitative, wherein we see an increasing sophistication in research designs. This is reflected in the progressive trajectory from cross-sectional, to time-lagged through 'true' longitudinal and most recently the proliferation of experience sampling designs for both data collection and analysis (see Ployhart & Vandenberg, 2010). In contrast, within qualitative research designs, we argue there is an asymmetry in this progression. Specifically, while methods for the collection of qualitative data reflect marked progression with an increasing number of publications employing creative, multi-modal data collection methods within longitudinal and 'shortitudinal[1]' designs (e.g. Cohen & Duberly, 2013; Zundel et al., 2018) analytical methods often remain as the standardised and commonly cited approaches which do not readily capture temporality.

This is particularly the case for qualitative scholars seeking to employ qualitative diary methods (QDM), which despite significant increase in their use, given the benefits they afford researchers (see Radcliffe, 2018) and indeed participants (see Cassell et al., 2019), specific analytical approaches for these data have remained in their infancy, lagging behind

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[1] See Dormann & Griffin (2015) for clarification of this term.

developments observed in their quantitative twin (e.g. ESM; Fisher & To, 2012). Indeed, a recent review focused on enhancing the rigour in QDM research explicitly calls for *clearer* procedures for analysis, noting that, while diary design practices are relatively well explained, far less has been written about analytical procedures, which are key in improving rigour in qualitative diary research (Filep et al., 2018). An example of this is the limited explication of within-person dynamism over the duration of diary keeping, wherein this is often mentioned fleetingly or rendered secondary to the between-person variation of thematic content (e.g. Plowman, 2010). We contend that the lack of analytical strategies available for individual-level research to meaningfully and systematically incorporate temporality contributes to this oversight.

In redress of this, our article offers a new method to analyse qualitative diary data. This method, Thematic Trajectory Analysis (TTA), builds on established thematic analyses procedures (Template analysis; King & Brookes, 2016) to enable analytical output suitable for visual mapping of thematic data, 'thematic trajectory diagrams'. These diagrams provide researchers with an added layer of interpretative power in their analysis by providing a means to: i) explore within-person variation of thematic content over time, ii) conduct between-person analysis by comparing and contrasting thematic-trajectories and iii) identify emergent categories of participants through this comparison. This approach harnesses the power of visualised data by providing an engaging, yet succinct, means to communicate and elucidate theoretical findings (see Langley & Ravasi, 2019).

To explicate this method, our article unfolds as follows: We first discuss the principles and purpose of qualitative diary methodology, followed by a critical review of existing diary studies. Here we highlight how these approaches limit consideration of temporality analytically and theoretically. We then present our methodological case study wherein we introduce and demonstrate the analytical method at the focus of this article.

Within this section, we draw on two projects to demonstrate the utility of the method across divergent study designs and research aims. In drawing the article to conclusion, we present a critical discussion of the contributions and advantages, potential limitations and design considerations of the method, as well as offering suggestions for future development.

QUALITATIVE DIARY METHODOLOGY

In recent years qualitative diaries have become popularised due to intensifying requirements for more dynamic research across methodological approaches (e.g. Vantilborgh et al., 2018; Allen et al., 2018; Radcliffe, 2018). Qualitative diaries have now been utilised to explore a plethora of topics in the realm of organisational behaviour, including stress at work (Clarkson and Hodgkinson, 2005), transient work patterns (Crozier and Cassell, 2015), transfer of learning (Brown et al, 2011; Sadler-Smith and Shefy, 2007), mistreatment at work (Thomas et al., 2015), gender and power in organisations (Plowman, 2010), work-family conflict decision-making (Radcliffe and Cassell, 2014), and experiences of flexible working (Radcliffe and Cassell, 2015). While quantitative diaries have benefits of immediacy over retrospective accounts (Symon, 2004) and the ability to capture fluctuations in particular variables that would not be captured taking a cross-sectional approach (e.g. van Eerde et al, 2005), qualitative diaries extend these benefits in important ways. For instance, they take greater advantage of the diary's ability to overcome issues with retrospective recall by expanding the depth and richness of the data collected in the moment. Thus, by allowing participants to express their experiences and associated meaning-making freely within the natural and spontaneous context of their daily lives, qualitative diaries are able to capture the rich details of the daily events and interactions that constitute organisational behaviour, as well as how they interact with one another, and thereby uncover the previously undiscovered (e.g. Plowman, 2010; Radcliffe and Cassell; 2014; 2015).

Further, qualitative diaries enable important new insights into processes and how and why organisational behaviour and relations may change over time (Radcliffe, 2018). While quantitative diaries are also able to capture change over time in terms of observing fluctuations in specific variables (e.g. Beattie & Griffin, 2014), they are not able to capture the complexity with regards to *how* one event or experience may influence subsequent events and experiences (cf. Taylor et al., 2017). This also lends itself to further comparative approaches, in which we can begin to understand *how* and *why* processes proceed in similar or different ways for different people, at different times (Herschovis & Reich, 2013). Qualitative diaries provide an opportunity to capture and explore these multifaceted links in a way that may be limited in other methods.

Qualitative diaries therefore offer scholars an approach that harnesses the depth and richness of qualitative data, but further the 'breadth' afforded by adopting a longitudinal approach. They can therefore be conceptualised as a method that captures both the *'down'* and *'across'* of qualitative data, wherein the 'down' reflects the rich, in-depth data enabling nuanced answers to 'why' questions, and 'across' represents the longitudinal element, supporting answers to questions about 'how' things change over time. In this sense, encouraging and supporting researchers to utilise qualitative diaries within their research designs, offers great potential to further our knowledge and understanding of organisational behaviour.

However, a significant methodological challenge in employing qualitative diaries is the lack of clear guidance on incorporating temporality into the analysis and subsequent theory development. As such, analytical approaches wherein both the 'down' and 'across' benefits of the diary method are fully exploited are currently lacking. To explicate this, we now review existing qualitative diary studies with a focus on how data was analysed and how, if at all, temporality was incorporated into the study theoretically and analytically.

REVIEW OF EXTANT QUALITATIVE DIARY STUDIES

To identify relevant articles, we conducted a comprehensive review of high quality, peer-reviewed, publications. Specifically, we restricted our search to journals ranked 3 – 4* in the 2018 Academic Journal Guide, focussing on the five relevant fields of 'General management', 'Organisation studies', 'Human resource management', 'General psychology' and 'Organisational psychology'. To identify relevant studies, search terms included "qualitative" in conjunction with "daily diary*"; "diary*" and "temporal* diary". Across the 83 journals reviewed, we identified a total of 372 articles for screening. After removal of duplicates and eligibility screening, i.e. exclusion of purely quantitative studies and studies with no primary data collection using qualitative diary methods (i.e. study refers to the researcher keeping a reflexive diary), a total of 62 studies were reviewed (see table 1.).

Insert table 1 about here

Our review corroborates that qualitative diary methods are increasingly used in high-quality journals across organisational disciplines, for example, half of the eligible studies ($n = 31$) were published in the last 5 years. Yet despite this increase, our review reveals a dominance of traditional analytical methods, notably grounded/ inductive analysis, 'methodology specific' approaches such as Grounded theory or the 'Gioia' method ($n = 17$) to more generic thematic analyses ($n = 12$). While these are established methods for analysing qualitative data, in the context of the diary studies reviewed, they often rendered the data a-temporal, given their procedural reliance on thematic fragmentation (King & Brookes, 2016). In addition to this limitation, we further identified a tendency for studies ($n = 7$) to lack detail and specificity in their explanation of analytical procedures, particularly when diaries formed part of a multi-method study. This ambiguity reduces the potential for future researchers to replicate or adapt the analysis in their own research. Accordingly, rather than structure our review solely along the type of analytical approach adopted, we structure our review along

the degree to which temporality was accounted for within the eligible studies. To categorise the studies in this way, we worked collaboratively to review each article along three guiding questions: 1) how were the diary data analysed? 2) how were the findings presented? and 3) how was temporality considered? While questions 1 and 2 are self-explanatory, to address question 3, we assessed how the studies framed the phenomenon of interest i.e. static vs dynamic, whether the research question was aimed at exploring change/ dynamism and whether the analysis and findings explicitly explored change (i.e. over-time) in the phenomenon/ participants experiences thereof. From this process, we derived three categories: 'non-temporal', 'partly-temporal' and 'strongly-temporal'. It is noteworthy that while we have categorised studies in this way, it is not our intention to position this as reflecting a hierarchical proxy of 'good research'. Instead, we uphold the primacy of theory-method commensurability in conducting high-quality research (Gehman et al., 2018). To explicate these three categories, we mirror the structure of Allen et al. (2018) by providing an overview of the category and critique of exemplary studies. Selection of exemplar studies based on the number of citations and topical relevance to individual-level organisational behaviour scholarship. We present a critical discussion of these studies in relation to their use of diary methodology, with emphasis on the analytical approaches adopted.

Non-temporal studies

Within the context of our review, we defined studies as 'non-temporal' when there was no temporal framing of the phenomenon or research question, and no explicit exploration of time/change/dynamism within the analysis or presentation of findings. These studies tended to focus solely on the 'down' benefit of diary research in that they sought to capture rich detail in the moment, overcoming issues of retrospective data. Within these studies, the 'across' benefit of diary methodology, as a rich longitudinal approach that enables researchers to examine unfolding processes and within-person variations over time, is not

considered. From the eligible studies, we identified 21 studies as non-temporal, and below we review a well-cited example:

Exemplar study

In one of the earliest examples of diary methodology in organisational psychology research, Waddington (2005) utilised diaries as part of a multi-method study (included interviews and critical incident reports) to explore the characteristics and function of work-related gossip in healthcare organisations among a sample of 20 nurses. Given the phenomenon of interest, work-related gossip, Waddington positioned the use of diaries as an apt means to reveal the private, unseen, nature of the phenomenon. In this study, the diary reflected a mixed-design, comprised of Likert scale questions and two open-ended questions, to elicit the content of the gossip and emotional impact/ response to the gossip episode. Participants were instructed to complete the diary on an event-contingent basis, however, the study neglects to detail the diary-keeping period, an early indication of the non-temporal focus of the study. In terms of analytical procedures, for the qualitative aspect of the diaries, the authors relied on Template analysis (King & Brookes, 2016) following a sequential integration approach, i.e. analyse diaries, then critical incident data and finally the interview data. Given the focus of the study, capturing experiences in the moment enabled interesting insights into the relationship between gossip and emotions, demonstrating how experiences of gossip elicit both positive and negative emotions in nurses. However, no comparison or consideration of how these emotions vary within or between participants was provided, which would arguably also have been interesting to explore.

Partly-temporal studies

In contrast to the above non-temporal studies, we define 'partly-temporal' studies as those where there is *some* consideration of temporality or change over time. In the 22 studies identified, two manifestations of partly-temporal approaches emerged. Firstly, when there

was an acknowledgment of dynamism in the framing of the phenomenon and research question, i.e. daily experiences, yet analytically and in the findings the study privileged static, thematic content (e.g. Radcliffe & Cassell, 2015) Secondly and conversely, while only a limited number of examples were identified, studies were also classified as partly-temporal if they included temporality in the presentation of findings, yet neglected to incorporate this in the substantive theorisation or discussion thereof (e.g. Travers, 2011)

Exemplar study

The study of Crozier and Cassell (2016) employed audio diaries to explore the relationship between stress and transient working patterns in a sample of temporary workers ($n = 6$). Here the use of audio diaries presented a significant contribution to qualitative diary methodology, as such the authors provide a detailed explanation of their approach. In collecting the diaries, participants were provided with a Dictaphone and prompt sheet which contained 10 prompts (i.e. [talk about] whether you feel stressed, and why/ why not). The diaries were recorded on an interval-contingent basis; twice weekly over a period of 4 weeks. Once Dictaphones were returned, data were transcribed and analysed thematically. In explaining their analysis procedures, the authors cite *'each diary was subject to a thematic analysis at the within-person level, thus producing six individual accounts'* (p. 405). This, alongside the framing of the study, which positions the use of diaries as a means to explore the *process* orientation of stress, demonstrated a clear temporal focus. Accordingly, this paper provides two examples within the findings in which the authors have made a within-person comparison across two time points for two participants, highlighting where elements of a temporally-sensitive analysis have been utilised to produce interesting insights. For example, the authors demonstrate how one participant expressed contentment with a lack of training in one entry only to frame this as problematic in the next. While these comparisons provide insight into the fluctuations of the experiences of the temporary workers, the absence of an

analysis approach that readily enabled temporal sensitivity across the dataset meant that remaining findings tended to rely on static fragments of text and themes, hindering further demonstration of within-person variation. Hence, despite emergent temporal insights, we classified this study as partly-temporal as temporal insights across the sample and spanning the time period of diary completion were not possible.

Strongly-temporal studies

Studies defined as being strongly-temporal are those wherein temporality is considered both theoretically and analytically. By virtue of this temporal sensitivity, these studies are those wherein the 'across' benefits of diaries are best exploited. Our review identified 19 studies that adopted a strongly-temporal perspective, drawing on a range of analytical approaches. It is however noteworthy, that these studies reflected the most variability in both analytical procedures and epistemological positioning. For example, many of these studies relied on content analysis, the quantification of qualitative data, as the means through which to analyse qualitative data temporally. Within studies that remained purely qualitative, these studies tended toward a collection of analytical procedures, resulting in a lack of clarity as to how the diary data were incorporated. Alternatively, these studies relied on especially small sample sizes, (e.g. single participant; Vidaillet, 2007) or were underpinned by a 'process' perspective. In the latter, these studies further tended to focus on organisational level phenomena (cf. Fisher et al., 2018). Collectively, the characteristics of these studies suggest a dearth of analytical procedures for qualitative researchers whose interests lie at the level of the individual and/or epistemological positions are incommensurate with content analysis and the quantification of qualitative data. To tease out the limitations of these strongly-temporal studies, we discuss an exemplar and conclude with a collective discussion of these articles.

Exemplar study

In their recent study, Cain, Frazer and Kilaberia (2019) draw on audio diaries to explore the identity work of a newly formed healthcare team as they attempted to create, and adopt, a new approach to care. The study is both conceptually and theoretically temporal in that it aligns with the position that identity, and identity formation, is not a fixed process but rather dynamic and continuous. In collecting the diaries, all members of the newly formed team recorded weekly 'observations' over a period of 30 weeks. While this study presents a detailed overview of this team, from a methodological standpoint, it lacks specificity in places. For example, there is no clear indication of how many members kept diaries, given that the team is described as having 5 core members in conjunction with 'three to nine care guides'. Procedurally, participants were asked to submit their 'observations' on being part of the team, working with patients and interactions with other professionals. The authors note that these observations reflected brief stories, amounting to a total of 176 recordings over the 30-week period which were transcribed for analysis. In analysing the data, the authors developed a theoretical coding scheme, with which the data were analysed deductively. This coding scheme reflected three dominant themes, 'cohesion' 'subgroups' and 'jurisdiction', which the authors derived from the literature on small group dynamics (see pg. 373 & 378). The authors followed principles of content analysis, by 'tallying' the number of care members per week who 'spoke to each of the themes'. Whilst not explicitly detailed in the analysis, it appears that the authors derived a percentage score for each of the three themes for each week. For example, in week one, 'cohesion' appeared in roughly 80% of the diaries, whereas the theme 'subgroup' appeared roughly in 58%. The authors illustrate this by creating an x-y diagram for the themes, wherein the y-axis reflects percentage score and x-axis the week. By mapping the quantified data in this way, the authors created a trend diagram for all three themes over the 30-week period (see pg. 380). From this diagram, the

authors identified two critical moments, 1) weeks 8-14, wherein peaks and valleys move into a 'steady' period and 2) weeks 17-22, wherein there is a movement from a 'steady period' to peaks and valleys. In discussing these critical moments, the authors present a zoomed-in diagram that focusses on the relevant weeks and follows the traditional format of qualitative research by presenting participant data and researchers interpretive narrative. Whilst a complex method, this analytical process reflects a strongly-temporal approach and is one of the more novel and sophisticated approaches we found in the eligible studies.

Collectively, the analytical procedures in studies identified as strongly-temporal reflect a number of limitations for individual-level research. In particular, these procedures are limiting and lack flexibility in terms of being appropriate for researchers utilising a range of theoretical perspectives and with diverse epistemological underpinnings. We see this in the above study of Cain et al. (2019), which makes a significant contribution by crafting a unique means to demonstrate change over time through the inclusion of diagrams. However, the means through which these diagrams were generated precludes qualitative scholars who eschew deductive coding and/or content analysis, because of the connotations as 'positivist' qualitative research. Moreover, given the sample was comprised of a singular team, the applicability of the method to more heterogeneous, individual level, samples may be limited. Those studies that remained purely qualitative tended to focus on macro-level phenomena or rely on particularly small samples. While small sample sizes afford researchers scope to present extended individual accounts that demonstrate change over time, this limits researchers with larger samples that reflect contemporaneous publishing norms. Lastly, while process approaches are increasingly utilised in individual-level research (e.g. Bankins, 2015; Jansen & Shipp, 2018), there are limitations to doing so. Firstly, methodological guidance on conducting process-based research typically suggests that researchers include observations. This has obvious limitations for individual-level research that explores behaviours unsuitable

to observational methods and is doubly unfeasible if we consider observing a sample of disparate individuals. However, we contend that the use of diaries (frequent in process studies) and subsequently TTA, lends itself to adopting a process perspective by providing a potential means to overcome the reliance on observational data by offering an analytical tool that explicitly incorporates temporal dynamics.

Drawing on two divergent projects, we now introduce Thematic Trajectory Analysis, a flexible, step-by-step approach that facilitates adopting such a temporal focus to enable researchers to fully exploit the temporal nature of qualitative diary data.

METHODOLOGICAL WALK-THROUGH

Introducing Thematic Trajectory Analysis: A four-step method

To conduct TTA, researchers are encouraged to follow four steps, which we describe below. As previously discussed, this analytical approach builds on Template analysis (King & Brookes, 2016)), an established approach to thematic analysis, frequently used within organisational behaviour research (e.g. Fernando and Kenny, 2018; Crozier and Cassell, 2015), as well as other disciplines (e.g. Hesse-Biber et al., 2018). As with most qualitative analysis procedures, these steps provide the basic 'how-to' of the method, while encouraging flexibility and creativity in application. Within this section, we draw on two projects, introduced below, to demonstrate the utility of the method across divergent perspectives, diary designs, data sets and research aims.

Project Overviews

The work/ family conflict project

The first project aimed to explore how dual-earner couples with child dependents experience and manage work-family conflicts on a daily basis, with a particular interest in how work and family conflicts unfold in real-time, and the 'ebb and flow' of daily experience (Allen et al., 2018). In addition, it aimed to explore the role of gender and couple-level

dynamics in terms of potential intragroup differences. In tandem with couple and individual interviews, pen and paper-based, qualitative event-contingent diaries (Iida et al., 2012) were kept by both members of 24 couples (48 participants) over a four-week period. Each participant was asked to record the work-family conflict experienced, how the conflict was resolved, and emotional experiences related to this conflict. Recent reviews of work-family conflict research have problematised our lack of understanding regarding change in work-family conflict across time (Allen et al., 2018) despite work and family being inherently dynamic, as well as our focus on static 'levels' approaches to work-family conflict, rather than 'event-based' designs (Maertz et al., *in press*). As a result, much of the existing work-family research remains blind to the influence of temporality. This study utilised qualitative diaries to capture in the moment thoughts and emotions that may be lost using more retrospective methods, and to enable a more fine-grained understanding of how work-family conflict experiences unfold. This project was conducted following interpretivist assumptions in which the researchers were interested in understanding individual participants' experiences from their perspectives.

The mistreatment at work project

The second project explored individual's sensemaking processes in experiences of interpersonal mistreatment at work. Drawing on a sample of 42 self-identified targets of mistreatment, diaries were used in conjunction with in-depth narrative interviews to explore how experiences of mistreatment emerged and evolved over time. By combining these two methods, the project explored how those identified as having particular response and coping strategies at the time of the interview, enacted these on a daily basis. The diaries were, therefore, a means through which to gain insight into the temporal dynamics of mistreatment at the day level, by exploring within-person variability in experiences of work, negative and positive interactions and how the individual evaluated and responded to these events over

time. Diaries were kept for a period of 3-4 weeks, with participants completing the diary at the end of each working day, thereby following a fixed interval-based design (Iida et al., 2012). The diaries in this project were smartphone-based using a specially designed application to collect data. As such, given the medium of the diary, to enhance usability, the diary also included an 'emotion rating system' based on a 7pt Likert scale wherein participants would swipe up/down to select a 'face' that best suited their mood at the time of entry. The diary, therefore, collected a quantitative affective evaluation, followed by four qualitative questions 'How was work today?', 'Did you experience any negative interactions and/or mistreatment today?', 'In what ways did this impact you?' and 'How do you feel about going to work tomorrow?' The project enacted a retroductive reasoning analytical strategy, which comprises both deductive and inductive analyses, thereby iterative movements between data and theory in coding and interpreting the data (also known as abduction; see Fotaki, 2013). No statistical inferences were drawn from the quantitative data.

Step 1: Create data display matrices

To conduct TTA, it is firstly necessary to prepare all diary data for analyses by organising and structuring the data in a way that is expedient to examine changes over time, by means of a data display matrix (Miles & Huberman, 1994). These display matrices make complex data more understandable by reducing it to its component parts, therefore, making a large amount of data 'accessible' whilst doing justice to the complexity of the data, enabling cross-site and within-site comparisons (Nadin & Cassell, 2004). Within TTA, the purpose of this step is to arrange the data in a way that affords researchers an accessible means to visualise *variation over time*. Time-ordered displays such as these have been previously described as a method to help preserve "chronological flow" and permit understanding of what led to what (Miles & Huberman, 1994). Given this focus on temporality, it is most useful to organise the matrix so that columns denote the temporal unit (e.g. day/ week/ month

of entry) and rows represent the questions or topic areas posed in the diary nested for each participant. For example, in the work-family conflict project, the first diary question asked participants to describe their work-family conflict, which translated into the major theme, 'Type of work-family conflict', and was therefore the key focus of the first row of the matrix prepared for each participant. This allowed the different kinds of conflicts experienced each day to be explored side by side.

If the diary reflects an unstructured design, i.e. journal style diary without guiding questions (e.g. Wechtler, 2018), different options could be considered appropriate to denote each row. For example, studies with a theory/ theoretical lens in mind, particular concepts of interest could be used here. Alternatively, for studies that are more inductive in nature, tentative areas of interest may be identified based on initial familiarisation with the data, noting that these could be modified as further analytical steps are undertaken. In practice, we envisage that a combination of the above might be appropriate for many studies. Here we encourage researchers to use this approach flexibly, in a way that is commensurate with philosophical perspectives, research approach and design.

Step 2: Thematic template analysis at micro, meso and macro levels

Following creation of the data display matrix, the next step is thematic reduction following the procedures of Template Analysis (see King & Brookes, 2016 for detailed instructions). However, rather than only creating one template representing data from an entire study, TTA involves the creation of multiple templates at three levels:

Firstly, TTA involves the creation of a series of *'micro-templates'* for each individual diary entry, allowing researchers to have an understanding of key issues, events or experiences at each temporal unit (e.g. day, week, etc.). It is useful for micro-templates to be contained within the matrix format created at step 1 to facilitate viewing thematic change over time. Secondly, researchers create a '*meso-template'*; a composite template of the full

set of diary entries for each participant, by combining all micro-templates from a given participant. In doing so, it is important that researchers include the days on which particular themes were experienced in order to retain temporal grounding of the themes, an example of which can be seen in Janet's meso-template (see figure 1). Following creation of the micro- and meso-templates, researchers can then consolidate the meso-templates to create a final *'macro-template'* of the entire study's diary data, reflective of the output of traditional template analysis (King & Brookes, 2016). Here, there is also the option to generate more than one macro-template where research questions aim to explore how daily experiences and changes over time may vary among subgroups of the study sample. For instance, separate macro-templates may be created for 'men' and 'women', where the research seeks to examine gender differences.

In practice, the three levels of templates are best created concurrently, enabling the researcher to 'zoom in' to the day-to-day accounts (micro-templates), and 'zoom out' to participant (meso-templates), and study level data (macro-templates). In line with the flexibility of template analysis, researchers may begin with some initial a-priori codes for study templates or take a more inductive approach to derive data-driven themes of interest depending on epistemological positioning and study aims (see King & Brookes, 2016).

Step 3 - Visualisation of thematic trajectories

To enable researchers to fully explore variation over time, TTA provides a process to visually map the trajectories of the thematic content building on the templates prepared in step 2. Practically, the researcher would select the major theme(s) from their macro-template in which they require an understanding of change over time. Once they have decided on the themes of focus, a simple x-y style diagram for each participant should be created, where the X-axis denotes the movement over time (e.g. temporal unit, such as day of entry) and the Y-axis reflects the theme selected for temporal visualisation.

Researchers would then use the data contained in the meso-templates, to enable them to plot each of the sub-themes related to the selected major theme along the y-axis. A point can then be plotted on the diagram to represent which of the sub-themes was present for the respective day or temporal unit for that participant. Figure 1 illustrates this translation from template to trajectory:

Insert figure 1 here

Visualisation of thematic trajectories may be done with as many themes as deemed relevant to guiding research question(s) and interests of the study. We suggest researchers firstly map their trajectories by hand to determine the layout of themes before moving to digitalisation using their preferred software. It is important to highlight that the key value in this step of the process is in enabling identification of patterns over time, which are lost when analytical processes remain linear. While data reduction is necessary to afford this additional layer of insight, data complexity is maintained within the three levels of templates. When creating trajectory diagrams in the way described above, there are two key considerations to keep in mind:

1. Interval- or Event-Contingent Diary Design

At this stage, the design of the diary will have an influence on the mapping process. For example, if the diary reflects an interval-contingent design (see Bolger, 2003), such as the mistreatment project, where temporal units reflect consecutive intervals i.e. day of entry, there will be only one point plotted per temporal unit. In contrast, in event-contingent designs (ibid), such as the work/family project, there may be more than one entry for a given temporal unit (e.g. more than one entry on a given day). For example, in the work-family project participants were required to complete their diary every time they experienced work-family conflicts. Therefore, on some days there were multiple entries as participants experienced multiple conflicts (see figure 10 for an example).

2. Evaluative or Categorical Themes

Themes may be evaluative, wherein the thematic content reflects an evaluative dimension (i.e. increasing/ decreasing; positive/ negative), or categorical, meaning they reflect no progressive or evaluative element. For example, in the mistreatment project, the final question of the diary assessed the anticipatory effects of experiences on a given day in impacting the next day, asking participants *'How do you feel about going to work tomorrow?'*. Given the framing of this question, participants often responded with explicit evaluative statements, '*I feel good*', '*Dreading it, because of the issues mentioned above.*', as well as concise entries; '*bad*', '*fine*' etc. Accordingly, in developing the initial coding template, the a-priori theme 'Anticipation of the next day' was succeeded by three second-level sub-themes – 'Positive evaluation', 'neutral evaluation' and 'negative evaluation'. Thus, responses such as 'I feel good' were coded as positive evaluation, 'dreading it' as negative evaluation and 'fine', as a neutral evaluation. Therefore, in mapping the thematic trajectories for 'anticipations of next day', the process involved annotating the three evaluative themes along the x-axis following the logical progression of negative–neutral–positive (see figure 2).

Alternatively, where themes reflect no progressive or evaluative element, they may instead reflect distinct categories. For example, within the work-family project, the diary collected data on different types of work-family decisions made in relation to daily conflicts. In mapping the trajectory for the major theme, 'Decisions Made' (DM), the process involved annotating the four categorical sub-themes; Splitting time (DMS), Integrating (DMI), Choosing work (DMW) and Choosing family (DMF) as well as including a 'none-reported' theme; to ensure continuity in the trajectory diagram in instances where there was no decision reported in the diary to code. This is common within categorical themes, as participants may not have mentioned the particular theme on a given day. Thus, in mapping trajectories for categorical themes, the process follows the presence plotting for the relevant theme on each

and where no data is available for that theme, this is plotted as 'none-reported'. Figure 2

illustrates examples of the trajectories of evaluative and categorical themes from the

respective projects:

Insert figure 2 here

Step 4: Intra-and inter-theme trajectory analysis

Having visualised the thematic trajectories, researchers can now use these to conduct

an in-depth, temporally sensitive analysis at both within- and between-person levels.

Söderstrom (2019) recently demonstrated how the shape of 'life diagrams', which were

drawn during life history interviews, can be useful as a means of visual comparison across

participant's in search of similarities in the trajectory and/ or shape. Similar to Söderstrom

(2019) who considered the 'overall shape of the diagram' (p.11), in conducting the trajectory

analysis the impetus is to explore the shape of the trajectory over time. For example, are there

particular patterns that appear to be temporally significant – periods of stability and/or flux?

How does the participant's trajectory change over time? (within-person), How does this

pattern compare to others? (between-person). Here researchers will be asking: 'What is

meaningful about this pattern?' Where researchers have visualised more than one theme, they

may wish to compare these trajectories to further aid interpretation of the data. For example,

researchers might explore, if a particular categorical theme being present aligns with another

categorical theme also being present. Alternatively, if a particular categorical theme is present

is there an increase/ decrease in an evaluative theme?

Application of TTA

To demonstrate TTA, we now provide analysis and output examples from the two

projects structured along the three key benefits of the TTA method:

i)   **Exploring within-person variation of thematic content over time**

Within the mistreatment project, given the inclusion of the 7pt Likert emotion rating system, we were able to compare trajectories of this emotional rating with those of the categorical theme 'Interactions experienced'. In developing the coding template (step 2) for data relevant to 'interactions experienced', these were coded along two a-priori second level themes – 'person-related' and 'work-related'. This classification was informed by Bartlett and Bartlett's (2011) tri-partite classification of the kinds of mistreatment individuals experience at work: Work-related, person-related and physical violence. As no participants reported interactions that were physical and/or violent; we restricted the template to reflect work-related and person-related behaviours. As participants also recorded positive events/ interactions, the template was modified to reflect this in step 2; by adding the dimensions 'positive' and 'negative' as third level themes under work-related and person-related themes.

Using two sets of trajectory diagrams created in step 3, one focused on 'affective evaluation', and the other on 'interactions', we were able to explore the within-person variation of interactions experienced and participants affective evaluations of work and to identify particular patterns of change over time. For example, Max's trajectories reflect a consistent pattern of weekly troughs, as can be seen on days 4, 10 and 15 on both the interactions and affective evaluation trajectories:

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-----------------------------------------------------------------
                         Insert figure 3
-----------------------------------------------------------------
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In Max's case, the consistent pattern of troughs reflects the days wherein he is required to attend fixed-scheduled meeting with his managers, one of whom Max identifies as mistreating him at work. While he has other negative interactions with this individual across the diary-keeping period, these days, wherein he had to attend these compulsory meetings are the only days he reports experiencing both negative work- and person-related interactions, as well as rating his affective state most negatively. The trajectories diagrams therefore led to the identification of this pattern, which combined with rich contextual details of the

qualitative approach permitted insights to suggest that pre-planned and compulsory face-to-face interactions with alleged perpetrators may be particularly stressful and impactful.

In contrast, a different kind of patterning observed through the trajectories reflected staggered patterns of deterioration or improvement. Here the change over time is observed over the diary-keeping period, rather than a weekly fluctuation as observed in Max. Rene, for example, exemplifies this pattern of deterioration in her trajectories:

Insert figure 4

In both of Rene's trajectories, we see an initial positive period that drifts into a period of deterioration. During this, Rene experiences a decline in mood in week two before entering a period of negative interactions in week three. By using TTA, we were able to identify distinct patterns of change or rhythms of mistreatment, within participants. This included those who experienced fluctuations within the working week, reflecting more tumultuous mistreatment rhythms, such as Max, compared to those who showed staggered patterns of improvement or deterioration, such as Rene. The identification of the latter, particularly those who appeared to have positive weeks with no negative incident or interaction, challenge the notion of 'frequency' within dominant mistreatment measures, wherein exposure to mistreatment is proffered to occur on a weekly basis. For example, the most frequently employed measurement of workplace bullying, the Negative Acts Questionnaire (Einarsen et al., 2009), classifies individuals as 'bullied' if they experience at least two 'negative acts' on a weekly basis. Further, those individuals who experienced 'incident-free' weeks tended to report the most negative outcomes and impact when they experienced negative interactions or events. Rene for example, in her final entry in detailing how she responded noted: *I cried, gave up, came home, cried some more. Wrote this.* This suggests, somewhat counter-intuitively, that those who experience negative interactions more consistently are better able to cope than that those who experience mistreatment less frequently. This, in turn,

problematizes the assumption that frequency of exposure is a proxy for intensity and severity of mistreatment (e.g. Notelaers et al., 2006). This finding was identified through the comparison of participant trajectory diagrams, thereby illustrating the potential of this approach in revealing novel insights.

ii) Conducting between-person analysis; comparing and contrasting thematic-trajectories

The second key benefit of TTA is the ability to compare trajectories between participants. In the mistreatment project, noting the different patterning of interactions detailed above, we next sought to explore and compare how different individuals coped with daily negative interactions at work. Here specifically, while the content of interactions – i.e. whether it was person-related, work-related or a mixture thereof were largely similar across participants, it appeared that there were different coping mechanisms at play within different individuals. To compare these, we explored and compared the trajectories for the themes 'impact of interaction/event' and 'anticipation of the next day'. Taking the theme 'Impact of interaction/event', data were coded as being 'self-referential' if the participant spoke of how it impacted them emotionally i.e. *'I feel like my nerves are in pieces, I feel as if I am going to burst out crying and I am struggling to contain my emotions, I have got a migraine, every time I get an email I feel sick'* versus work-referential if they spoke of how an event/interaction impacted work, i.e. *'Keep chasing with mails and visiting offices, to-do list getting bigger because of the lack of communication'.* Once more, these included a positive and negative dimension (i.e. a positive *emotional* impact such as feeling valued, and positive impact if, for example, they were able to be productive, 'got lots done'). By comparing these thematic trajectories, we observed a tendency towards either self-referential or work-referential reporting within participants, regardless of interactions being work-related and/or person-related. In particular, there appeared to be a tendency of some participants to report

explicitly in terms of the emotional impact on themselves with no mention of the impact on work, compared to those who would frame the impact as having consequence at work, see for example the trajectories of Angela and Robin:

Insert figure 5 and 6

To explore this further, we scrutinised participants trajectories for the theme 'anticipation of the next day', here interestingly we found those who tended toward mixed-referential framing of the impact of events and interactions also tended towards more positive anticipations of the next day. Once more, Angela and Robin demonstrate this:

Insert figure 7 here

Strikingly in Angela's trajectory diagram, we see she had negative anticipations on every day with exception to the first day. To explore this further, we returned to the qualitative data in the diaries and found that those who tended toward work-referential or mixed-referential framing of impact also tended towards framing their anticipations in terms of work. Robin, for example, despite experiencing negative interactions/ events on the day, would report positive anticipations of the following day, even when her emotion rating and interaction described reflected highly negative experiences: she reports being *'very angry as his behaviour is jeopardising the work of a ot of people who have spent time and money supporting him to complete a course.'* yet describes a positive anticipation of the following day, *'I feel positive – I will be doing more work in the lab with my intern'.* In contrast for Angela, even when she experienced a positive day, *'The day actually turned out better than I had hoped. My line manager was on leave so was not in the office all day. Also, 2 colleagues asked me to go for lunch with them… It was nice to have some support.'* Her anticipation of the following day remains negative, *'I feel apprehensive in general and specifically in case she tells me off for booking flexi without giving umpteen days' notice.'*

This diametric patterning observed in participants diaries whereby they focus on the positive side of work, reflects a 'finding light in the dark' effect. Here participants are able to focus attention on what they enjoy about work, rather than entering a ruminative state about events of the day. Referring back to the thematic trajectories across all participants revealed that this strategy is an effective means to cope with mistreatment as those who engaged in this practise tended toward more positive evaluations of the day and more positive anticipations of the next day. The Thematic Trajectory Analysis in the mistreatment project therefore corroborated distinct patterns across the two a-priori groups derived from existing theory; those who tended toward more active coping strategies, such as reframing the meaning of events and those who adopted passive/ avoidant coping strategies such as rumination and avoidance. In contrast, reflective of its more inductive nature, the work/family project derived emergent groups from the TTA method, thereby demonstrating the third benefit of the method as a means to identify emergent categories of participants:

In comparing participants in the work-family conflict study, the most notable difference observed through the use of the trajectories were the clear gender differences in couples reporting of emotional impact. Here specifically, men tended to report having 'no impact' and more positive emotions than the women in the sample, even when they were members of the same couple, for example couple 18, Janet and Tim:

Insert figure 8 here

The emotion trajectories demonstrate this pattern even when the conflict reported was the same for both members of the couple. For example, on day 22, during the decision making Janet reports *"Panicking when it got to 5:10pm as the kids would be home and Gregory needs to be out again at 5:45pm […] I wondered if Tim would get him out on time"* compared to Tim, who explained, *"Janet had a panic because she was late home – no sweat*

really I took Gregory to self-defence and had tea later on". This was also observed across other couples, particularly in relation to guilt, frequently reported by women but not men.

To explore this further, comparisons between the two members of one couple was key to examining how their daily experiences were similar or different. When comparing trajectories, highlighting the different types of work-family conflicts experienced for both members of a couple clear differences became immediately evident in that women tended to report a great variety of conflicts and men reported fewer, and with less diversity. Previous research highlights the importance of exploring the differences in work–family conflict experiences of men and women (e.g. Powell & Greenhaus, 2010) and the qualitative diary data allowed us to see how these gender differences played out on a daily basis and the impact these different experiences had over time. However, when plotting these trajectories, it became apparent that there were cases where such gender differences were not evident, as some couples trajectories were very similar, particularly in relation to the 'types of work-family conflict' theme. We investigated this further by combining trajectories of males and females in the same couples to allow for a between-couple comparison. Comparing the different experiences of different couples in this way allowed us to begin to unpick the couple-level differences in daily experiences and practices. Compare for example couple 1 (Paul and Lucy), who experienced similar W/F conflict trajectories and couple 18 (Janet and Tim), whose trajectories were quite different:

Insert figure 9 and 10 here

This observation brings us to the third important benefit of this approach, whereby pattern matching enables grouping of similar patterns together across participants, leading to the formation of emergent categories.

iii) Identify emergent categories of participants through this comparison.

Here, the comparison allowed us to group couples into the emergent categories of 'traditional' and 'collaborative/shared care' based on the similarity of within couple trajectories (see 'types of WFC' trajectories of couple 1 and couple 18 above). These categories allowed for further between-person comparisons both within and between these newly created groups. For example, once grouped in this way it became evident that the women who were in more collaborative/shared care couples tended to experience more daily guilt whereas those in more traditional arrangement reported other negative emotions:

Insert figures 11 and 12 here

While previous individual-level, quantitative diary research has suggested that it is traditional men who tend to experience more guilt when family interferes with work, when compared to that experienced by all women, and less traditional men (e.g. Livingston & Judge, 2008), our qualitative findings with couples provide a more nuanced and complex picture. Our findings suggest that the way in which guilt links to experiences of work-family conflict is dependent on couple-level dynamics. In order to investigate this further, we again returned to the diary data to explore how these women talked differently about emotions surrounding their work-family decision-making. We also considered existing literature on maternal norms and intensive mothering, which indicates that our society defines a good mother as one who devotes their time, energy and resources to their children's needs (Walls et al., 2016). Subsequently, we theorised that women in collaborative couples tend to experience more daily guilt because of daily deviation from these maternal norms by sharing care with their partners. Furthermore, given that men were identified across the sample as reporting fewer negative emotions in comparison to the women, following this emergent grouping we sought to explore how the men differed between couple types. While men in shared couples generally reported more emotional outcomes (cf. 'none') they also reported

more negative emotions, interestingly however, there was a pattern of shared emotions between members of these couples. Consider couple 1 (collaborative) and couple 18 (traditional), for example:

Insert figures 13 and 14 here

This suggests a daily experience of greater sharing, not only of practical work-family tasks, but also in terms of shared emotional labour. Whereas previous research has suggested women tend to carry the emotional burden and 'additional labour' (Morehead, 2005) associated with managing daily family responsibilities, this approach allows us to explore daily emotional patterns in instances where this continues to be the case, as well as patterns suggestive of change.

DISCUSSION

In summary, we have introduced Thematic Trajectory Analysis, a four-step analytical approach for analysing qualitative diary data, which facilitates the incorporation of temporality, both analytically and theoretically. By following the four steps of TTA, drawing on examples from two distinct data sets to demonstrate how the analytical process works in action, we highlight the utility of the method in revealing original and temporally nuanced insights. In drawing our article to a close we now discuss the advantages of the method, as well as the limitations and design considerations in employing TTA. Our discussion concludes with a consideration of future developments and contributions of the method.

Advantages of Thematic Trajectory Analysis

The first advantage of TTA is that it provides a much needed and timely approach for incorporating temporality into the analyses of micro-level qualitative data, the absence of which has identified as a reoccurring concern in diary research (Filep et al., 2018). TTA addresses this absence by offering a systematised procedure-driven approach, which further enables a richer analysis of qualitative diary data than is currently available. The method

therefore responds to the increasing calls for, and existing shifts towards temporally sensitive research, wherein time and the dynamism of life in and around organisations is considered in a meaningful way (Allen et al., 2018; Vantilborgh et al., 2018). This, in turn, reflects the increasing proliferation of 'process-theoretic' perspectives in micro-level research (e.g. Bankins, 2015). TTA is therefore a means through which researchers may incorporate temporality, but further an entry to adopting perspectives that are inherently temporal, such as processual perspectives (Nayak & Chia, 2011).

The second advantage of the method is that it offers a flexible analytical approach that is suitable to diverse epistemological positions, research aims and diary designs. Specifically, as an adaption and extension of Template Analysis (King & Brookes, 2016), an established *generic* form of thematic analysis, TTA is adaptable to both inductive and more deductive coding strategies (ibid.) TTA is therefore suited to diverse epistemological and theoretical positions. This was demonstrated in our methodological walkthrough, wherein the two data sets diverged in their epistemological positioning and the enactment thereof.

Relatedly, we contend that TTA offers a rigorous means to analyse qualitative diary data, identified as lacking in extant diary literature (see Filep et al., 2018). We build this contention in line with accepted criteria of 'good of qualitative research', in particular, transparency and coherency (Cassell & Symon, 2011). Firstly, the methodological foundation of TTA is that of established rigorous methods, namely Template Analysis (King & Brookes, 2016) and display matrices (Nadin & Cassell, 2004; Miles & Huberman, 1994). Secondly, given TTA is a procedure-driven approach it supports the generation of a transparent audit trail as researchers can demonstrate their progression through the four steps, from data display matrix to trajectory diagrams. In particular, the visible linkage between the themes annotated trajectory diagrams and the meso- and macro-templates ensures a high degree of communicable transparency in how these trajectories were derived. Thirdly, while we outline

design considerations and suitable research questions in the section that follows, it is

noteworthy that TTA offers rigour in ensuring theory-method coherence (Gehman et al.,

2018). Specifically, as TTA enables explicit incorporation of temporality, it offers an

approach that allows demonstrable linkage between theory and methodological choices, a

core criterion of 'good' qualitative research (Cassell & Symon, 2011).

Potential limitations and design considerations

In line with the importance of TTA being commensurate with researchers' research

aims and approach, we further acknowledge important considerations when using this

method. Firstly, in terms of developing research questions suitable for TTA, we contend that

TTA is apt in exploring 'how' questions, in its most simplistic form, for example, researchers

may ask 'How does X change over time?'. However, as trajectory diagrams are to be

interpreted alongside thematically analysed textual data, 'why' questions may be used in

conjunction, given that most constructs do not change *solely because* of time itself (Polyhart

& Vandenberg, 2010). For example, researchers may pose a 'how' question in relation to

how a particular participants' experience of a phenomenon (or construct) changes over time,

in conjunction with a 'why' question to understand why experiences changes in the way they

do, returning to the thematic content to derive an explanation.

We also emphasise the importance of the highly iterative nature of TTA, wherein

researchers are required to cycle back and forth between trajectory diagrams and rich

contextual qualitative data. In this way, we propose that TTA not be treated as a linear

process and instead reflect the tradition of qualitative research as highly iterative and

recursive. Researchers should avoid interpretation of the trajectory diagrams in isolation and

instead ensure interpretations are grounded in the thematic content of the diaries. As

demonstrated within our step-by-step guide, returning to the qualitative content was key in

gaining insights into important findings. Therefore, we suggest that trajectory diagrams are

always presented alongside rich thematic content, rather than treated as a sole analytical output. Visualisation of the trajectories should be viewed as a process of data reduction, providing an extra layer of interpretive power that is key to enabling temporally sensitive findings and theorisation, but not sufficient alone without concurrent contextualisation within rich qualitative diary data.

Future Developments

While we encourage such researchers to adapt TTA to their individual needs, we acknowledge the potential limitations in doing so for more specialised approaches and suggest that more work is needed to explore the possibilities here. For example, those who strictly adhere to specialised methodologies such as discourse and conversation analysis (Wooffitt, 2005) may need to adapt TTA to fit the specialised coding procedures. This may be an area for future methodological developments.

In addition, while TTA has so far been employed specifically on data collected using qualitative diaries, the applicability of the approach to the analysis of longitudinal qualitative data collected by other means should also be considered in future research. For example, we can envisage how this might be applied to longitudinal qualitative data collected using multiple interviews or based on researcher notes collected as part of longitudinal participant observations. We suggest that exploring the applicability of this analytical approach across diverse longitudinal data sets has the potential to yield exciting new insights, both theoretical and methodological, in the future.

CONCLUSION

This article was motivated by a lack of analytical approaches available to qualitative researchers seeking to incorporate temporality within the analysis and theorisation of qualitative data. To this end, we presented Thematic Trajectory Analysis (TTA), a novel four-step analytical method most suited to qualitative diary data. The contributions of this

approach are threefold: Firstly, the main contribution of TTA is that it provides researchers with a temporally cognisant analytical approach that facilitates rigorous incorporation of temporality into the analysis and theorisation of micro-level qualitative data. Given the absence of such analytical methods, we contend TTA offers a comparable analytical method to those within micro-level quantitative designs (e.g. ESM). Secondly, TTA offers a contribution to the qualitative diary methodological toolkit by providing an analytical approach that exploits both the 'down' and 'across' benefits of diary methodology. Resultantly, TTA contributes by offering an analytical method aimed at enhancing temporally sensitive insights and theoretical contributions across the field of organisational behaviour.

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TABLES

Table 1. Articles reviewied from literature search (Abridged reference and temporality category)

Analytical Approach	Non-temporal studies (*n* = 21)	Party-temporal studies (*n* = 22)	Strongly-temporal studies (*n* = 19)
Grounded theory/ 'Gioia' method (*n* = 17)	1. O'Brien, E., & Linehan, C. (2014). 2. Cottingham, M. D., Johnson, A. H., & Taylor, T. (2016). 3. Linehan, C., & O'Brien, E. (2017). 4. O'Brien, E., & Linehan, C. (2018).	5. Williams, J., Ashill, N., & Thirkell, P. (2016). 6. Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2014). 7. Patterson, P. G., McColl-Kennedy, J. R., Smith, A. K., & Lu, Z. (2009).	8. Balogun, J., & Johnson, G. (2004). 9. Fisher, C. M., 10. Pillemer, J., & 11. Amabile, T. M. (2018). 12. Balogun, J. (2003). 13. Demir, R. (2015). 14. Jarzabkowski, P., & Wilson, D. C. (2002). 15. Lowson, E., & Arber, S. (2014). 16. Tran, M. K., Goulding, C., & Shiu, E. (2018). 17. Balogun, J., & Johnson, G. (2005).
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Miscellaneous/ combined (*n* =16)	40. Hilbrecht, M., Shaw, S. M., Johnson, L. C., & Andrey, J. (2008). 41. Riach, K., & Warren, S. (2015). 42. Fisher, K., & Hutchings, K. (2013). 43. Anderson, V., & Boocock, G. (2002).	44. Symon, G., & Whiting, R. (2019). 45. Atewologun, D., Sealy, R., & Vinnicombe, S. (2016). 46. Zhang, Z., & Spicer, A. (2014). 47. Wijnmaalen, J., Voordijk, H., Rietjens, S., & Dewulf, G. (2019). 48. Zundel, M., MacIntosh, R., & Mackay, D. (2018	49. Wiedner, R., Barrett, M., & Oborn, E. (2017). 50. Demir (2015) 51. Vidaillet, B. (2007). 52. Symon, G., & Clegg, C. (2005). 53. Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). 54. Smith, J. A. (1994). 55. Smith, J. A. (1999).
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FIGURES

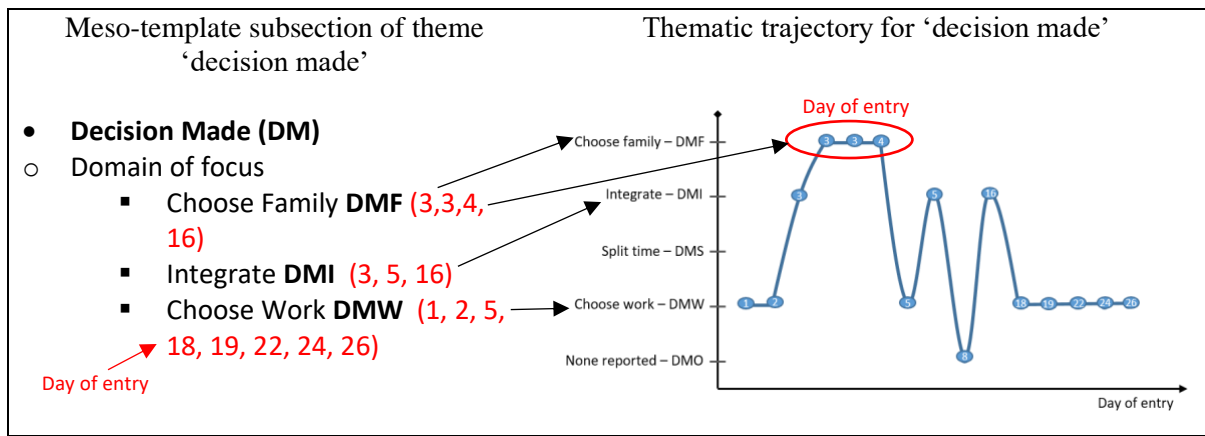Figure 1. Translation of thematic data to thematic trajectory

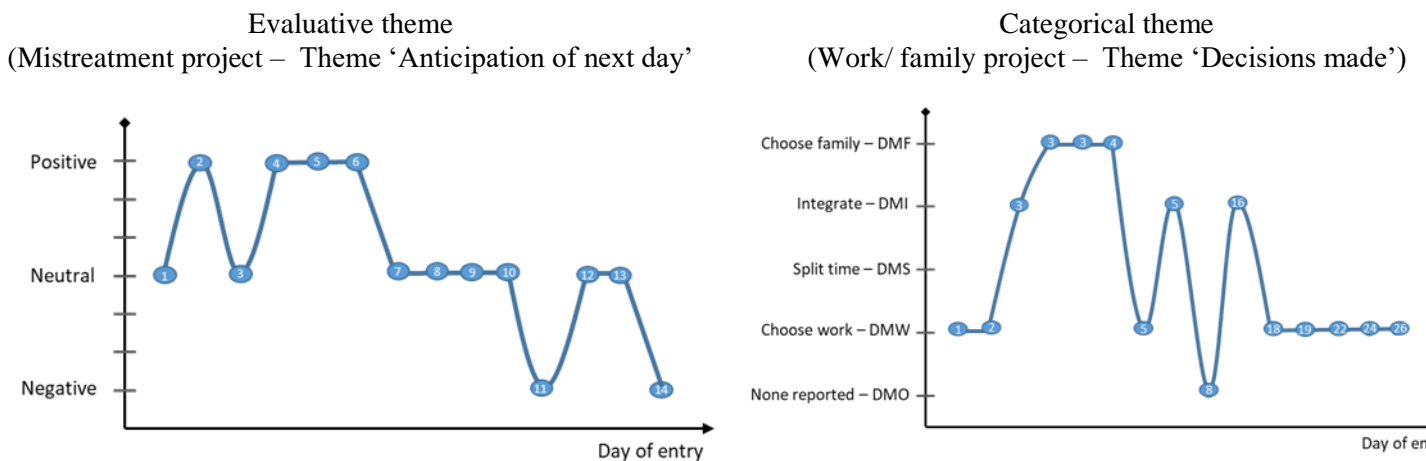Figure 2. Example trajectories for evaluative and categorical themes

Figure 3. Max 'interaction' and 'affective evaluation' trajectories
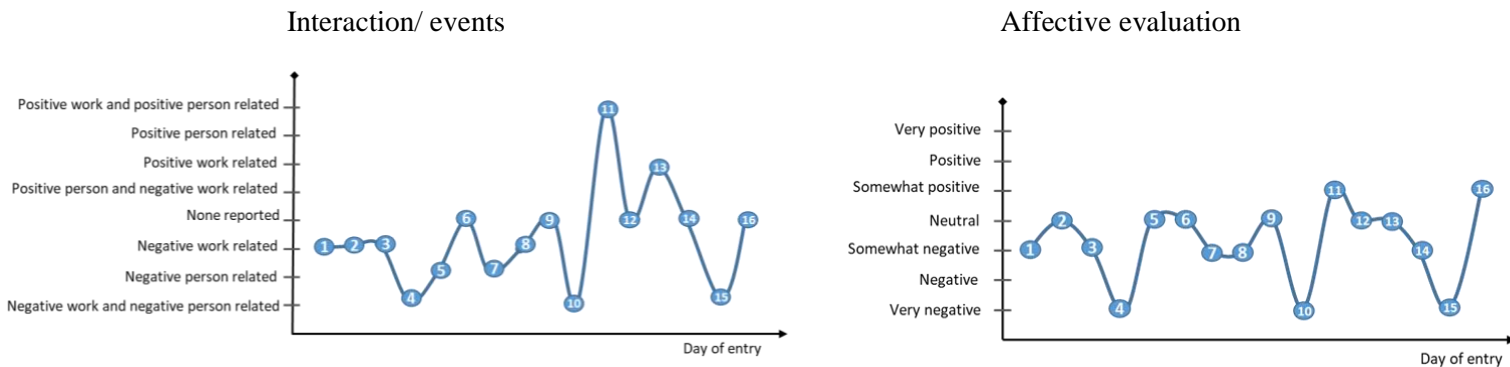
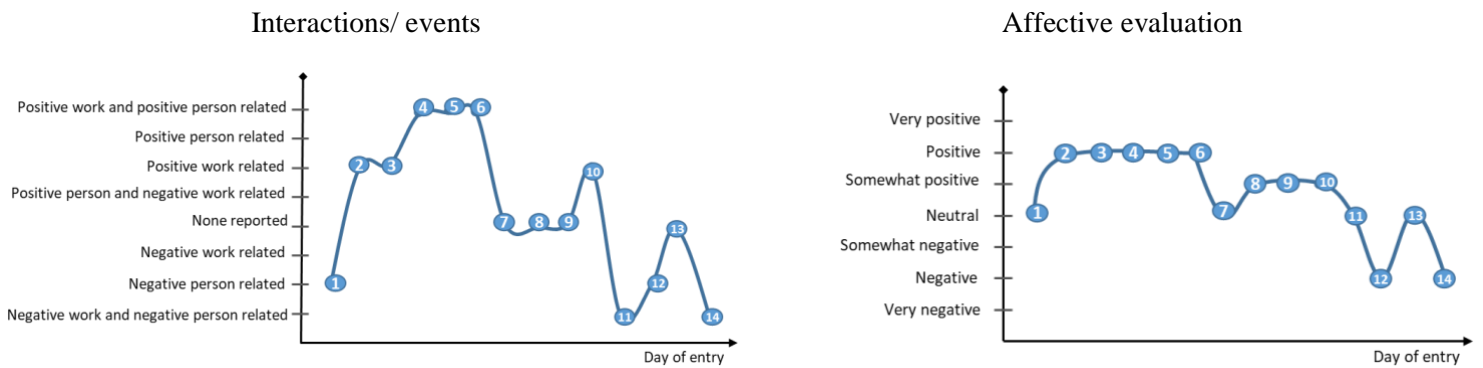Figure 4. Rene 'interaction' and 'affective evaluation' trajectories

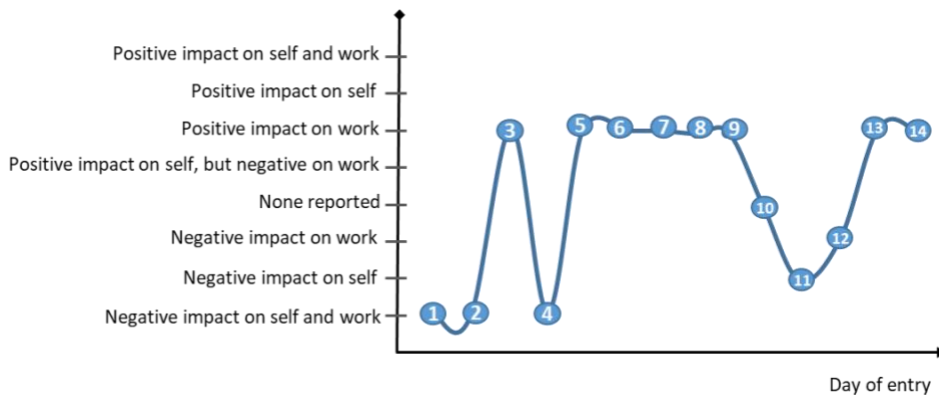Figure 5. Angela 'interaction/ event' thematic trajectory

Figure 6. Robin 'interaction/ event' thematic trajectory

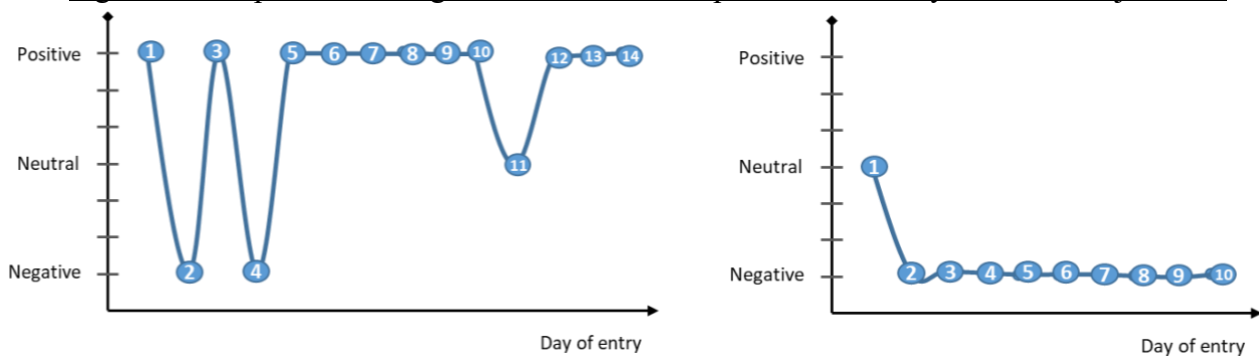Figure 7. Comparison of Angela and Robin 'anticipation of next day' thematic trajectories

Figure 8. Comparison of Janet and Tim (couple 18) 'emotional outcome' thematic trajectories

JANET   TIM
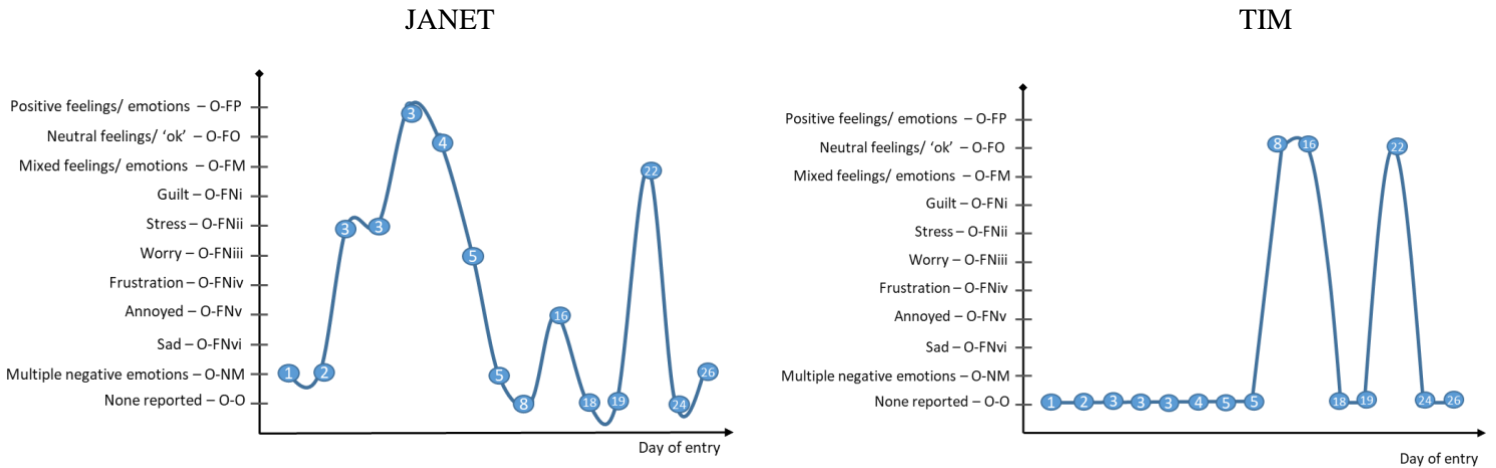
Figure 9. Couple 1: Type of W/F conflict trajectories
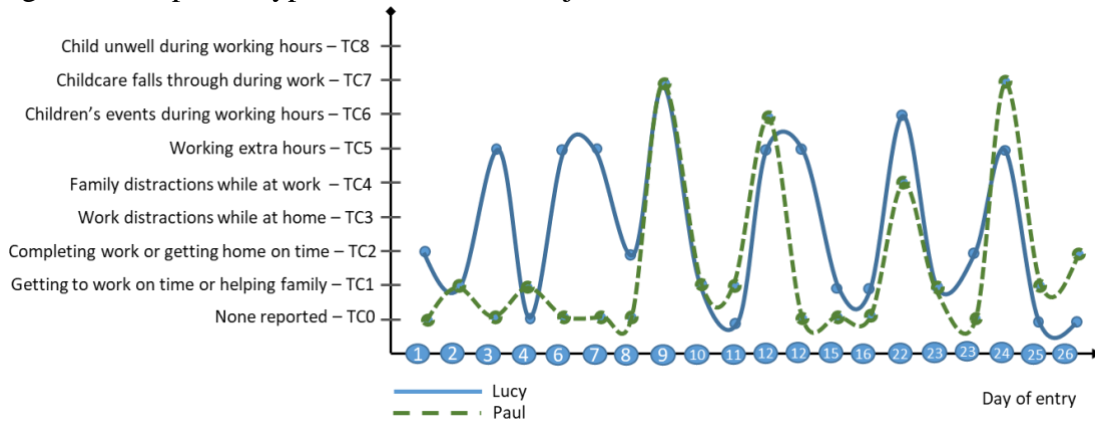
Figure 10. Couple 18: Type of W/F conflict trajectories
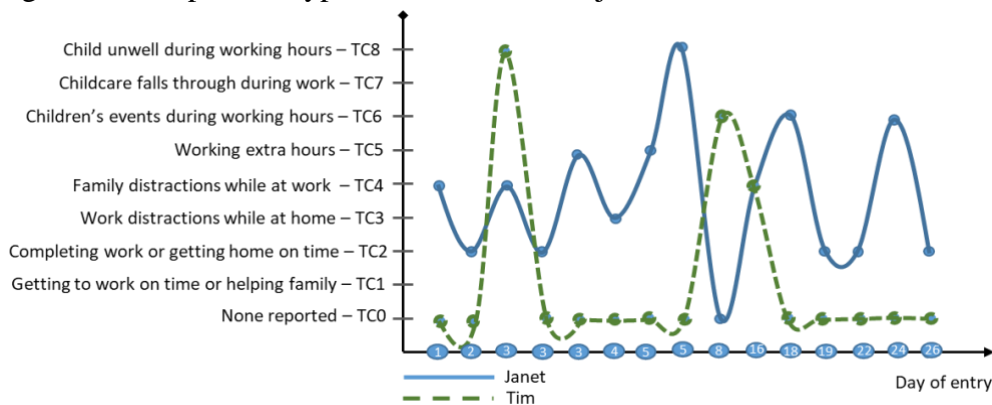
Figure 11: Lucy (Couple 1) emotional outcome thematic trajectory
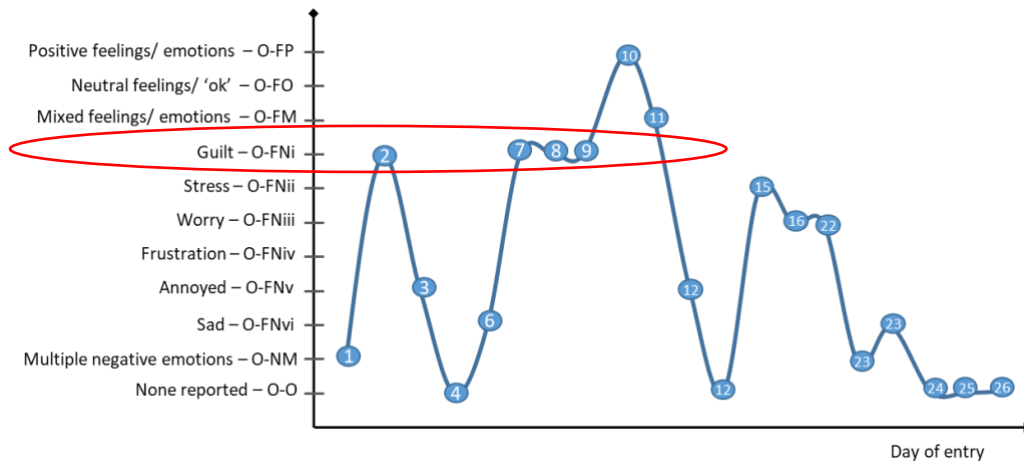

Figure 12: Sarah (Couple 6) emotional outcome thematic trajectory
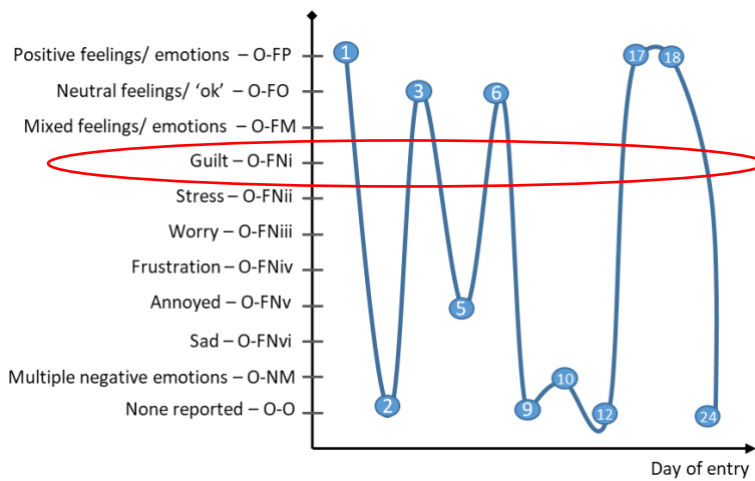

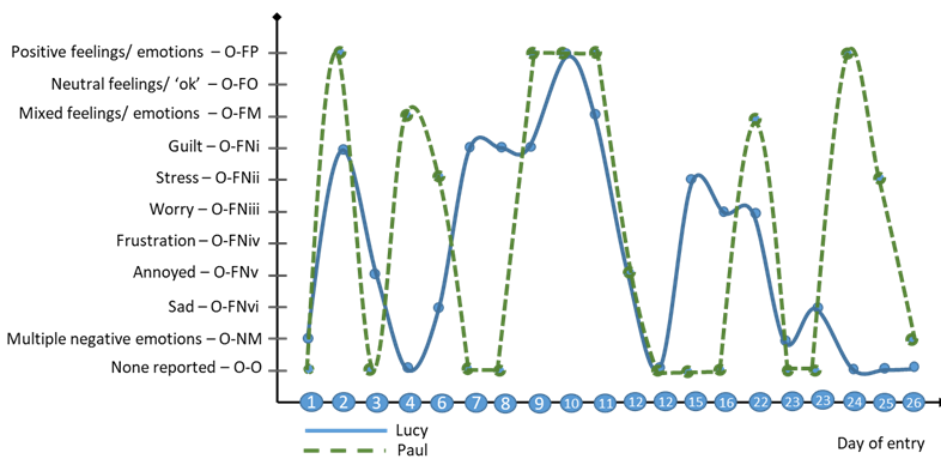Figure 13: Emotion trajectories in a collaborative couple (couple 18)

Figure 14: Emotion trajectories in a traditional couple (couple 1)