Inducing Transformative learning in a Game-Based Learning Environment

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Inducing Transformative Learning in a Game-Based Learning Environment
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Summary

In the recent decades, the workplace has undergone major changes. The work environments have become more dynamic and demanding affecting employees’ capacity to work effectively. To maintain employability and stay competitive, employees are expected to cope and adapt to these changes. Transformative learning is considered a meaningful type of learning that can help employees and adults in general to develop awareness of self and others. Further, transformative learning can help them to critically reflect on how they perceive their work experience and try to make meaning of it to take better quality actions and thus improve their future experience. A great deal of research studied transformative learning and the requirements needed for it to take place. Most of these researches followed a traditional context of implementation in formal educational or professional settings that are controlled by an instructor. Further the majority of these researches are retrospective nature, which limits our understanding to the transformational process while it is taking place. Hence, there remains a need for creative approaches for implementing and understanding transformative learning while it is taking place, and further for inducing its process and not just promoting it. GBL has proven to be a good medium for meaningful learning since it provides rich social experience, as well as a safe, friendly and engaging learning environment that satisfies the requirements of an appropriate transformative learning environment. Therefore, in the current study Game-Based Learning (GBL) was explored as a potential non-traditional context for inducing transformative learning in group settings and studying it while it is happening. First, a board game was designed as a tool for inducing transformative learning. Then an explorative case study design was adopted to examine the transformational process while it is taking place and investigate whether the implementation of the game resulted in inducing transformative learning. The target participants of the study were burnout employees, since they were considered as potential beneficiaries of transformative learning. The case study involved four Dutch burnout employees from the University of Twente who attended a workshop in which the board game was implemented. Qualitative as well as quantitative instruments were used in this research. Results showed that three participants experienced transformation, and also provided more understanding of the transformational process. Further, the results indicated that the board game had several strong points and provided a pleasant interactive experience. The current study also discussed points of improvements for next iterations, theoretical and practical implications as well as some limitation and suggestions for future research.
1. Introduction

In the recent decades, the workplace has undergone major changes. The work environments have become more dynamic and demanding affecting employees’ capacity to work effectively (Schaufeli, Leiter & Maslach, 2009; St-Arnaud et al., 2007). To maintain employability and stay competitive, employees are expected to cope and adapt to these changes (Fugate, Kinicki & Ashforth, 2004; Schaufeli et al., 2009). In attempt to support their employees in facing such challenges, organizations have become more interested in developing their employees and encouraging adult learning. More specifically, organizations now pay very close attention to offering new ways that provide a meaningful work experience and promote reflection among their workers. In this sense promoting transformative learning through the use of new tools that can engage learners in meaningful type of learning seems to be a worthwhile option that needs to be explored by both researchers and practitioners.

Transformative learning refers to way of adults learning that aims at “improving our understanding — of the world and our experiences — and the quality of our actions through meaningful learning” (Mezirow, 2000, p.8). It implies that individuals should be aware of how we gain our knowledge and aware of the values that form our perspectives (Mezirow, 2000). The transformation in itself is then a cognitive and affective process, that should result in a positive behavioral change (Mezirow, 1978; Taylor, 2008). Transformative learning in this regard is a meaningful learning that can help employees and adults in general to develop awareness of self and others, critically reflect on how they perceive their work experience and try to make meaning of it to take better quality actions and thus improve their future experience (Kreber, 2004; Mezirow, 2000, 2003; Yorks & Sharoff, 2001). Yet, transformative learning is also considered as a complex and multifaceted type of learning that is difficult for the learners to achieve on their own and demands many requirements for it to happen (Kitchenham, 2008; Snyder, 2008). Though a great deal of research addressed these issues extensively, there remains a need for creative approaches for implementing and understanding transformative learning.

Transformative learning has become one of the most widely researched topics in the adults learning field (Cheney, 2010; Taylor, 2008). This is because of its complexity as well as its great potential to offer a meaningful type of learning in many areas and disciplines. Nevertheless empirical research in transformative learning falls short when it comes to exploring creative mediums and seems to follow what we can call traditional contexts and methods (Taylor, 2007, 2008). Though these researches provided detailed insights of the implementation of transformation, they only present some facets of transformative learning. Therefore there is still a need to shed light on what transformative learning may further offer, and how it can be
induced and not just encouraged or promoted. Further, adult learners have become more sophisticated learners who are bombarded everyday with innovative tools, and transformative learning might not seem appealing if it remains in the traditional direction.

Some of the previous research focused on understanding certain aspects or concepts of transformative learning and their implementation, while the majority focused on how to foster transformative learning (Berger 2004; Cranton and Carusetta, 2004; Daloz, 2012; Groen & Hyland, 2010; King, 2004; Kreber, 2004, Taylor, 2003, 2007). They followed mainly traditional contexts of group learning. For example: “formal higher education inclusive of graduate students, faculty or workshop participants involved in professional and leadership development, with little exploration in non-formal educational settings” (Taylor, 2007, p. 175) as well non-formal professional settings that are “less controlled by the instructor” (Taylor, 2007, 186). Despite the fact that there are existing studies in different contexts or using different mediums, they remain rare (Doering, 2006; Liimatainen et al. 2001; Ziegahn 2001). Moreover, most research on transformative learning is retrospective nature, which limits our understanding to the transformational process when it is taking place and not just how it is perceived or narrated later while being subjected to learners’ memory loss and social desirability (Groen & Hyland, 2010; Wood, 2007; Taylor, 2007).

Exploring new contexts or mediums for transformative learning will help uncover more of its potential that can inspire new research and can further provide more engagement for its learners. On the one hand, transformational learning is fostered in group learning settings within a safe, supportive and trustful environment (Groen & Hyland, 2010; King, 2004, Wood, 2007). These aspects can be regarded as the requirements for the transformational learning environment, and therefore they should be considered when exploring a new context (Snyder, 2008). On the other hand, a learning context like Game-Based Learning (GBL), has shown the potential of offering a good medium for meaningful learning since it provides rich social experience, as well as a safe, friendly and engaging learning environment (Hromek & Roffey 2009; Shute, et al., 2011; Zagal, 2006). Transformative learning can benefit from these qualities since they potentially satisfy the requirements of a transformational learning environment. Hence, GBL seems to be worth exploring as a new untraditional context for transformative learning.

Another point to consider in the context of implementing transformative learning is the targeted group of adults learners. Transformative learning has been studied in a varied educational disciplines and professions. In this study burnout employees are studied as a potential beneficiary group of transformative learning. Burnout employees experience work difficulties resulting in feeling emotionally drained, distant from work and lack of self-accomplishment (Schaufeli et al., 2009). Research has shown that the way employees perceive and see their work situation predicts their burnout level more than other measurements.
related to the work environment (Garrett & McDaniel, 2001). Moreover, it was found that when burnout employees were encouraged to deeply reflect on their work-related beliefs, they developed more awareness and were able to take actions to change both themselves and their work situation (Gustafsson, Norberg & Strandberg, 2008; Vinje & Mittelmark, 2007). Transformative learning can help burnouts to critically reflect and develop awareness and understanding of self and others, as well as form a healthy perspective about one’s self and work experience (Mezirow, 1978).

To sum up, this study aspires to explore an untraditional context—like GBL—for implementing transformative learning which can satisfy the requirements of a transformational environment and uncover more of its potential. This untraditional context will also provide an opportunity to study transformative learning while it is experienced by a potential adult learners group like the burnout employees. Therefore, the goal of this study is to explore how transformative learning is experienced within a group in a GBL environment. To achieve that, the study will first design and develop a game-based learning tool that induces transformative learning, taking into account aspects that foster transformative learning provided from previous research. To induce the transformation means that the participants are strongly assisted to experience the transformational process. Then investigate in a qualitative case study how the participants—the burnout employees—experience transformative learning while it is taking place.
2. Theoretical framework

This chapter provides a theoretical framework for understanding the concepts of transformational learning, game-based learning, game design and burnouts. The chapter discusses overview of these concepts, related definitions, relations and previous findings.

**Transformational learning**

**Theory overview**

It was in 1978 when the transformational learning theory was first introduced by Mezirow as a theory for adults learning. Mezirow started theorizing a type of learning experienced by individuals who face a disorienting dilemma in their lives. A disorienting dilemma is a certain challenge “that cannot be resolved by the usual way we handle problems by simply learning more about them or learning how to cope with them more effectively” (Mezirow, 1978, p. 101). A challenge could be the loss of loved ones, relocating to a new place, loss of job or career troubles, being rejected or betrayed (Mezirow, 1978). The dilemma is then experienced when the individual's way of making sense or meaning of life and perspectives formed from previous experiences fails to interpret a new situation or how the world works (Mezirow, 1978, 2003). Different feeling of discomfort emerge when one experiences such conflict. It is then when the individual starts to critically reflect and question the validity of the old constructed meaning perspectives and assumptions that form what he called one’s frame of references (Mezirow 1978, 2003).

The learning occurs when one develops awareness and is conscious about this problematic frame of references, explore other perspectives and transform this frame of references to a more liberating and empowering one (Spurlin III, 2013; Mezirow, 1978, 2003). The theory has been revised several times and further developed by Mezirow and others for application in different contexts (Kitchenham, 2008; Taylor, 2007; Wood, 2007). For instance, in educational settings for curriculum development, adults learning, group and organizational learning (Imel, 1999; Mezirow, 2000; Taylor, 2000; Wood, 2007; Yorks & Marsick, 2000).

Transformational learning in this sense refers to a type of learning which helps one to transform taken-for-granted “problematic frames of reference—sets of fixed assumptions and expectations (habits of mind, meaning perspectives, mindsets)—to make them more inclusive, discriminating, open, reflective, and emotionally able to change” (Mezirow, 2003, p58). These frames of references are more empowering since they can “generate beliefs and opinions that will prove more true or justified” to guide one’s action (Mezirow, 2003, p. 58). Therefore,
learning in the transformational learning theory cannot be viewed merely as a traditional learning that aims at mastering a subject matter. It further implicates a core development process in which there is an evolution and growth of a “refined awareness of self and of others within a broad, flexible way of thinking” (Spurlin III, 2013, p. 36).

**Mezirow’s model of transformational learning**

Mezirow developed a model to define transformational learning. The model explains the details of the transformational process through ten steps or phases that result in a transformed perspective (see Table 1). The ten step map to a long process of learning and core change that takes time rather than an instantaneous change experienced by the learner (Kitchenham, 2008). This change is realised when the new perspective is fully integrated into one’s life and reflected on actions, behaviours, and attitudes (Mezirow, 1978, 2000, 2003).

The ten steps start with the individual’s experience; a disorienting dilemma. A disorienting dilemma can be for instance a health situation, family conflict or difficult situation, work-related experience (Howie & Bagnall, 2013; Illeris, 2011; Stuckey, Taylor, & Cranton, 2013; Sessa et al., 2010; in Timmer, 2015). This is followed by the examination of discomfort feelings that leads to the third step of the critical assessment of assumptions. “Without the expression and recognition of feelings participants will not . . . begin critical reflection” (Taylor, 2000, p. 291).

Table 1

**Mezirow’s transformational learning model**

<table>
<thead>
<tr>
<th>Steps</th>
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<tr>
<td>1. A disorienting dilemma</td>
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<tr>
<td>2. A self-examination with feelings of guilt, shame or anger</td>
</tr>
<tr>
<td>3. A critical assessment of epistemic, sociocultural or psychic assumptions</td>
</tr>
<tr>
<td>4. Recognition that one’s discontent and the process of transformation are shared and that others have negotiated a similar change</td>
</tr>
<tr>
<td>5. Exploration of options for new roles, relationships, and actions</td>
</tr>
<tr>
<td>6. Planning of a course of action</td>
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<tr>
<td>7. Acquisition of knowledge and skills for implementing one’s plans</td>
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<tr>
<td>8. Provisional trying of new roles</td>
</tr>
<tr>
<td>9. Building of competence and self-confidence in new roles and relationships</td>
</tr>
<tr>
<td>10. A reintegration into one’s life on the basis of conditions dictated by one’s perspective</td>
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</table>
The third step then is considered the core of the transformational process and, during which an intensive examination of the limiting assumptions that caused the dilemma takes place. The assumptions could be about the world, others, or one’s self, and the examination is done through the process of critical reflection, which involves two levels; objective and subjective reframing (Mezirow, 1998). The first involves examination of the assumptions themselves, what are their nature and consequences, and the second involves the examination of their causes and the “related circumstances of their origin” (Kitchenham, 2008, p.114).

The fourth step, is the recognition and sharing of the transformational process, in which the discovery of the unhealthy assumptions and others having similar processes are realised. The fifth step is about exploring new options through the exploration of other perspectives. While, the planning of a course of actions based on the explored options takes place in the sixth step.

The following steps aim at implementing this plan, by first acquiring the skills needed for implementation which is step seven. Then trying out the new roles and actions to validate the new perspective, till they are mastered and one becomes competent in these roles which are steps eight and nine. Finally, in the tenth step, the roles explored from the new perspective, become a way of living and a part that can not be separated from one’s life. In this sense, what we can consider a true transformation that impacts and transforms one’s perspective and way of living is more about the journey and the process rather than reaching a single point of outcome.

A cardinal aspect of transformational learning is the experiences that one face throughout life, and they way one makes sense or meaning of these experiences (Spurlin III, 2013). Meaning making is an ongoing process. It implies that the what we accept as knowledge for experiencing the future is shaped and dictated by the one’s old constructed ways of interpreting and perceiving experiences (Mezirow, 1990, 2000; Spurlin III, 2013; Taylor, 2007). Hence, meaning making is fundamentally dependent on one’s frame of references that acts implicitly as a belief system for interpreting and evaluating the meaning of experience, and consists of smaller units which Mezirow called meaning perspectives (1978, 1991).

A meaning perspective is further a collection of small meaning schemas, and it is a structure of the deeply rooted “assumptions within which new experience is assimilated to and transformed by one’s past experience. It is a personal paradigm for understanding ourselves and our relationships” (Mezirow, 1978, p. 101). Therefore, the change in meaning perspective is called perspective transformation, and it is stimulated and triggered by a disorienting dilemma. For this transformation to take place, one should be critically aware of the assumptions that shape how one sees oneself and others, as well as the past experiences and how one makes meaning of it. In other words, one should become critically reflective (Mezirow, 1978, 2000; Taylor, 2007; Snyder, 2008).
Critical reflection is a key aspect to transformation learning. As mentioned earlier, “a refined awareness of self and others” (Spurlin III, 2013, p. 36) is the most important product of the transformation process. Spurlin further elaborates, this learning is concerned with the transformation of one’s consciousness in a way that it becomes reflectively aware. More specifically, transformational learning focuses on critical self-reflection as defined by Cranton and Carusetta as “being aware and critical of our subjective perceptions of knowledge” (as in Snyder, 2008, p. 165). This subjectivity of perception is understood when one is aware that the interpretation or meaning making of experiences is a result of existing meanings of previous experiences. To add, not only it is enough to be aware of such perceptions, the critical aspect of reflection is essential as well for transformation to happen, since it creates the urge of examining and questioning existing perceptions and assumptions.

Central to achieving critical self-reflection is the critical discourse or the reflective “dialogue involving the assessment of beliefs, feelings and values” (Mezirow, 2003, p. 59). It is worth mentioning that the discourse should also involve assessment of the justifications related to the beliefs, feelings and values, as well as a consideration of the other’s perspective (Mezirow, 2003). Further, in the last steps of the transformational process, “the learner tries out new roles in an attempt to test and validate new frames of reference. The learner can only achieve this role-playing by engaging in critical discourse with others and then reflecting on the results of that discourse.” (Snyder, 2008, p. 165, 166).

According to Snyder (2008) engaging in critical self reflection and discourse are considered two requirements for transformational learning to take place. A third requirement is the existence of appropriate context for transformation. Snyder explains this context in two facets, the first is the learner’s cognitive context that exists in the learner’s mind and represented in one’s life experiences, or in other words transformation is a type of learning that is appropriate for adults with life experiences. While the second facet is the literal context, the actual surrounding environment of the learner, as well as the environment in which the learning takes place. By satisfying and facilitating these three requirements a model for inducing transformational learning can be developed.

**Inducing the transformational process**

By inducing the transformational process it is meant that the participants are strongly assisted by external factors to go through and experience each of the defined steps of the transformative model. It is hypothesized in this study that the transformational process can be induced by facilitating the previously mentioned requirements; engaging the learner in critical reflection and discourse, and existence of appropriate context with its two facets: creating an
appropriate learning environment of transformation as well as choosing a relevant group of adult learners.

**The Role of facilitator in transformational learning.** Engaging the learner in discourse involves another person, who tries to guide and facilitate the critical reflection process. This person could be a mentor, instructor, or a coach. Many researchers emphasized the central roles taken by facilitators or coaches in mediating and smoothing the way for transformational learning (Groen & Hyland, 2010; Haber-Curran & Tillapaugh, 2015; King, 2004, Timmer, 2015; Southern, 2007, Wood, 2007). A skillful facilitator can encourage participants or learners to reflect more, explore more and endure the discomfort of the transformation process, and therefore promote the transformation. Daloz (2012) explained that one might fear the unknown of the transformational journey and hence the importance of a facilitator who acts as gatekeeper and a guide throughout the process.

Facilitators can have several role throughout the transformational process. When studying the transformation educators experience during professional development courses, King (2004) reported that the roles taken by the instructor had the highest influences on learners’ transformational process. More specifically she found the instructor’s support during the learning process and instructor’s challenge and questioning of students’ views and assumptions are the main roles that contribute to student’s perspective transformation. Other studies like Daloz (2012) and Wood (2007) also found the same two roles of they called a mentor to influence transformation; providing support and challenge. Daloz further added a third role namely providing vision; which refers to facilitating self-reflection and reassuring that a transformation can be achieved, while Wood added a fourth role of celebrating the learner’s achievement. These different roles are interchanged by the facilitator during the transformational process to meet the needs of the learner (Daloz, 2012; Wood, 2007)

**Triggers of critical reflection.** Besides facilitating the process of transformation and the critical discourse by a coach, critical self-reflection can be further facilitated and stimulated with other triggers. Timmer (2015) summarized some of these triggers from previous research. They include, group discussions, using metaphors or fiction, storytelling, role playing, and the use of reflective journals. Also, in King’s study (2004) it was found that providing a variety of reflective activities like discussions, journals, self evaluation and reflective moments influence perspective transformation. Further, other techniques like photo elicitation using symbolic picture as well as real pictures of the individuals themselves were found to promote reflection on experiences and examination of life events (Brand et al., 2016; Frith & Harcourt, 2007; Harper, 2002; Padgett et al, 2013; Taylor, 2003).
Context of transformation. The first facet of the existence of appropriate context is applying the transformational process to learners who have life experiences shaping the way they perceive the world and react to it (Snyder, 2008). In this sense transformational learning can be induced for different target groups of adult learners. Nevertheless this study focuses on employees who suffered or are still suffering from burnout. This target group is chosen because learners were subjected to a work-related disorienting dilemma that needs to be addressed and resolved in meaningful way than just coping or surviving with the experienced symptoms. A detailed discussion of this target group and its relevance to the context of transformation will be discussed later in this chapter.

The second facet of an appropriate context is creating a learning environment that promotes the transformational process. For this purpose, group learning is considered as an appropriate learning environment. Learning resulting from group activities and interactions within the group members plays an essential role in individual’s learning (Scott, 2003). Critical dialogue or discourse is not necessarily between the learner and the facilitator, it can also occur between group members, in which they can exchange perspectives or what Mezirow called perspective taking from the other (Eisen, 2001; Mezirow, 1978, 2003). Therefore, learning in groups provides space for exchanging experiences, views and sharing of the transformation, which is considered a very important part of the critical reflection process (Mezirow, 1987, 1991, 2000).

Group learning was found to be a good context for fostering transformational learning in previous research (King, 2004; Mezirow 1987, 2003, Scott, 2003, Yorks & Sharoff, 2001; Wood, 2007). King (2004) found that being in a group and having group discussion as well as having supportive group members were of the main factors that contributed to perspective transformation and changed the way the participant viewed the world. Also, Wood (2007) found that group members challenge each other's assumptions and beliefs, and therefore influence the transformation of one another.

Central to the group learning context is the safety of the learning environment. A trustful environment in which group members feel safe and comfortable with one another and with the facilitator to share and exchange personal experiences is considered a requirement to group learning (Daloz, 2012; Groen & Hyland, 2010; Taylor 1998). Groen and Hyland (2010) studied the transformation process of marginalized adult learners and found that creating and maintaining a safe learning environment was the most important factor for transformation from the learner’s’ point of view. They explained that a safe environment is the one that allowed establishing good relationship within the group as well as with the instructor and provide a friendly learning experience. Further, King’s (2004) study results highlighted the importance of having a safe supportive environment for transformation to continue. Her results showed that
being in non supportive and unsafe learning group or social circle that criticise, judge and doubt the learner’s new change was the biggest barrier to translating the new perspective into actions.

In the previously highlighted studies, the requirements of transformal process were satisfied mainly in the traditional classroom context or set up. Though these studies reported that the learners experienced transformation of perspective, it is worthwhile to explore other learning contexts that can satisfy the requirements of a transformational environment and further provide more engagement opportunities for learners. Hence, the following section will explore how Game-based Learning as a learning context can satisfy and realise the requirements of a safe, trustful, friendly and relaxed learning environment that encourages relationships and group learning and therefore how it is relevant to the context of transformation.

**Game-based learning as a context of transformation**

Games are considered as powerful tools for fostering both young and adult learning, especially learning that takes place in groups. (Hromek & Roffey, 2009; Xu et al., 2011; Zagal, Rick & Hsi, 2006). They provide a very good context for promoting social interaction between players and fostering engagement. Hromek and Roffey (2009) argues that GBL promotes and facilitates social and emotional learning skills. These skills can be divided into two groups that are relevant to transformational learning. The first group, includes recognizing, identifying, expressing regulating personal feeling, values and strengths, focusing on the positive, ability to plan actions and goals, effectively dealing with personal coping and relationships by means of problem solving (Hromek & Roffey 2009). Such aspects or skills are considered relevant to a high extent to the content of the transformational learning process as described in the ten steps model. Therefore this suggests GBL as a suitable medium to transformational learning from the point of view of the learning process content.

The other group of skills promoted by GBL include good communication with others, treating others with respect, compassion, care and embracing diversity, acknowledging mistakes. Further, they include valuing relationships, managing confrontations and conflict, connecting with individuals by creating and sustaining healthy relationships (Hromek & Roffey 2009). These aspects transpires GBL as a “highly motivating approach provides the opportunity to create a safe, fun environment, where social connectedness and meaningful participation are likely to occur” (Hromek & Roffey 2009, p.2). Therefore, GBL is considered very relevant and appropriate as a context of transformation since they satisfy the previously mentioned requirements of the transformational learning environment.

GBL can be implemented and actualised using a wide range of game forms. The game experience is a combination of the form of the game and the playing learners (Xu et al., 2011).
This makes the choice of the game form an important aspect in facilitating the transformational learning process. Choosing inappropriate game form that conflict with the requirement of the transformational environment could be a barrier to the learning process. For instance, one could imagine that using digital game form would not satisfy the requirement of establishing supportive relationships as well as the safety requirement that could be compromised due to the lack of physical presence. On the other hand, the use of physical board games can have many benefits that are relevant to the requirements of the transformational environment.

**Implementing GBL using board games**

For promoting better interaction and connection between players, the physical presence of players, focusing on a mutual object, and the synchronized play experience are regarded as key elements (Collins, 2004). These elements can be realised in board games. Physical board games have different aspects that make them an attractive choice in learning within a group. “The unbroken success of old-fashioned board games clearly relates to the social situation associated with them” (Magerkurth et al., 2004, p. 73). One could describe this social situation as a relaxed, joyful and friendly experience when recalling the mental images associated with playing board game. Further, players are physically present in the same place, focused and oriented to the board as a common object, sharing laughs and fun moments, connecting with one another, and therefore having a very rich engaging social experience (Magerkurth et al., 2004; Xu et al., 2011). Moreover, the open and accessible nature of board games, specially the well structured and designed ones allow transparency of the interaction and players’ status in the game, making it a good choice for observation and analysis in research (Zagal et al., 2006).

**Designing board games**

When designing board game two important factors are to be considered; the game category and the game design model. First the choice of the game category, games can be categorized as competitive, cooperative and collaborative (Game theory as in Zagal et al., 2006). Considering the transformational learning context, on the one hand competitive games conflict with idea of creating a safe and supportive learning environment since players oppose each other. On the other hand, collaborative games seem more appropriate to the transformational learning environment than cooperative games, since unlike cooperative games players work together as a team to achieve a common goal and therefore collaborative games provide a more supportive and relaxing environment (Zagal et al., 2006).

The second factor is choosing a design model. Literature shows a variety of game design models. Among these models is the game design atoms model by Brathwaite and Schreiber (2009) that explains the basic elements or components for a well designed game. This model is
chosen in this study due to its simple structure and clarity of its components (Heintz & Law, 2015). Details of this model will be presented later in chapter three.

After discussing how GBL can be adopted as an appropriate of transformational learning environment, it is important to discuss the other facet of the transformational context represented in a specific target group for inducing transformational learning. Transformational learning is a meaningful learning that can benefit a wide spectrum of individuals. As mentioned earlier a disorienting dilemma can be manifested in a work-related experience. Hence, this section explores burnouts as possible beneficiaries of the transformational process.

**Burnouts: as a target group for transformational learning**

Burnout was introduced in 1970s by Maslach and her colleagues as a work-related concept of specific negative symptoms that people experience from their work (Schaufeli et al., 2009; Maslach, Leiter, & Schaufeli, 2008). Employees start their worklife with high expectation and determination to succeed, over the time some they start to suffer from high job demands and challenges. They become overwhelmingly exhausted, frustrated, angry, cynical and develop a feeling of ineffective and failure (Leiter & Maslach, 2003). These symptoms and feelings can cause both personal and social impairment, resulting in taking sick leaves in some cases, quitting jobs, while other employees keep working with very minimum resources and productivity (Leiter & Maslach, 2003; Van Der Klink & Van Dijk, 2003)

Burnout was first used as a term to explain what employees in human services suffer from due to the extensive emotional contact with patients or clients (Schaufeli et al., 2009). Nevertheless, nowadays burnout is regarded as a universal mental illness experienced across a wide range of professions outside human services like managers, educator, entrepreneurs, white and blue collars. It is defined as as “a persistent, negative, work-related state of mind in ‘normal’ individuals that is primarily characterized by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behavior at work” (Schaufeli & Enzmann, 1998, in Ruotsalainen et al., 2008, p. 167). Burnout is conceptualized as a construct through three dimension, which are emphasized in the previous definition, namely emotional exhaustion, depersonalization or cynicism, and professional inefficacy.

Emotional exhaustion represents the stress dimension of burnout. This work related stress or exhaustion mainly results from work overload, lack of resources and conflict, making employees feel drained and can not find enough energy to face just another day at work (Leiter & Maslach, 2001, 2003; Van Der Klink & Van Dijk, 2003). Leiter and Maslach (2003) describe
emotional exhaustion as “the feeling of being emotionally extended and having depleted emotional and physical resources” (p.93). Cynicism or depersonalization reflects the interpersonal dimension of burnout, and it refers to a negative feeling of being distant or detached from other people and work with. Distancing can also be mentally through the development of a negative cynical or indifferent attitude. Cynicism is often a protective reaction of being exhausted and overloaded and hence there is a strong relation between the two dimensions (Leiter & Maslach, 2001, 2003). The third dimension is the professional inefficacy which explains the self evaluation aspect of burnout, and it refers to the “feeling of incompetence and a lack of achievement and productivity in work” (Leiter & Maslach, 2003, p. 93). This feeling of inefficacy is often a result of lack of professional development and social support, and it develops in parallel with emotional exhaustion and cynicism (Leiter & Maslach, 2001, 2003).

Sources of burnout

Previous research investigated sources from the workplace environment that contribute to the development of burnout. Leiter and Maslach (2001) examined six sources of burnout that result from a mismatch between the individual’s expectation or resources and individual’s perception of organizational demands (see Table 2). In this study, the six mismatches are used in the context of transformational learning to identify the dilemma and to examine related assumptions of the perception of the work environment.

Table 2

<table>
<thead>
<tr>
<th>The six individual/organization mismatches</th>
</tr>
</thead>
<tbody>
<tr>
<td>The mismatches</td>
</tr>
<tr>
<td>WorkLoad</td>
</tr>
<tr>
<td>Control and decision making</td>
</tr>
<tr>
<td>Reward (moral, financial, social)</td>
</tr>
<tr>
<td>Supportive community and relations</td>
</tr>
<tr>
<td>Fairness</td>
</tr>
<tr>
<td>Values</td>
</tr>
</tbody>
</table>

Feelings experienced during burnout

Burnout syndrome is associated with physical, mental, and emotional symptoms (Leiter & Maslach, 2001; Schaufeli et al., 2009). The focus in study is on the emotional symptoms, represented in a set of negative feelings which the burnout experience. This set is summarized from the different definitions of burnout and its three dimensions, symptoms, consequences, and feeling resulting from sources of burnout or due to the mismatch between employee and
organizations (see Table 3). In this study, the presented feeling are used in the context of transformational learning to examine feelings of discomfort associated with the work-related experience or dilemma.

Table 3

*Feelings experienced during burnout experience*

<table>
<thead>
<tr>
<th>Feelings or emotions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhaustion/drained/used up</td>
</tr>
<tr>
<td>dissatisfaction</td>
</tr>
<tr>
<td>frustration</td>
</tr>
<tr>
<td>Cynicism/indifferent</td>
</tr>
<tr>
<td>Anger</td>
</tr>
<tr>
<td>Anxiety</td>
</tr>
<tr>
<td>Ineffectiveness and failure</td>
</tr>
<tr>
<td>Incompetent</td>
</tr>
<tr>
<td>Overwhelmed</td>
</tr>
<tr>
<td>Distant/lonely</td>
</tr>
<tr>
<td>Abused/taken for granted</td>
</tr>
<tr>
<td>Feeling of hostility</td>
</tr>
<tr>
<td>Feeling of inequity</td>
</tr>
<tr>
<td>Don’t feel worthy</td>
</tr>
<tr>
<td>Feeling alienated</td>
</tr>
<tr>
<td>Feeling Unrespected</td>
</tr>
<tr>
<td>Powerlessness</td>
</tr>
<tr>
<td>Resentment</td>
</tr>
</tbody>
</table>

**Transformational learning for burnouts**

The burnout experience is regarded as disorienting dilemma that imbalances one’s life, and triggers many negative feelings and assumptions about oneself and work environment (Sims & Julius, 2015; Van Der Klink & Van Dijk, 2003). Employees who encounter such a work disorienting experience need first to be aware of how it happened (Van Der Klink & Van Dijk, 2003). Then, they need to learn how to cope with it and overcome it by developing a healthy perspective about themselves and work. In other words employees need to undergo a meaningful transformation to be able to cope and re integrate (Sims & Julius, 2015). Nonetheless, many burnout case keep on working without confronting their work challenges, while others don’t even report their burnout because they are concerned to be regarded as weak or incapable. Furthermore, previous research showed that around 44% of burnouts who take sick leave to recover, return to work (RTW) without overcoming the burnout problems, which make them highly subjected to relapse (St-Arnaud et al., 2007; Van Der Klink & Van Dijk, 2003). Hence,
inducing transformational learning should be considered as an important part of the reintegration and coping process of both working and non working burnouts.

Transformational learning can help burnouts examine the negative feelings and unhealthy assumptions about their own self, others and work experience. Such assumptions develop unconsciously through the years; some of them are deeply rooted since childhood, teenage, throughout adulthood and work years (Mezirow, 2003; Taylor, 2007). Some of these assumptions are not directly related to work, nevertheless they impact the way burnouts experience the work-life. Therefore, examining them may help burnouts understand what went wrong and resulted in their burnout. For instance, through critical reflection they start questioning how and when did their draining emotional exhaustion and the feeling of inefficacy develop, what were the sources. Also they start developing awareness of the cynical or indifferent attitude developed as a coping or defense reaction, and moreover reflect on how did all the previous affect their perception of work and life in general. Then, they take the next step of transformation and develop a more healthy and liberating perspective about their own self and their work situation by exploring other options, attitudes, roles, relationships, actions and integrating them (Mezirow, ;Van Der Klink & Van Dijk, 2003).

The current study

Context and scope

The discussed previous research in transformational learning either aims at implementing the concept of critical reflection to foster transformational learning or aims at understanding the factors that led to transformational learning. The first type mainly uses reflection trigger and facilitates the three mentioned requirements of transformation. The latter type of research that aims for understanding the transformational factors is mainly retrospective in nature, describing the transformational process after the transformation took place. Both types of research examine transformational learning in what can be called a traditional context; for example in graduate courses, organizational learning programs and workshops.

Unlike these researches, this study tried to induce transformational learning in a short time, in which the participants were strongly assisted and were walked through the steps of transformational learning. Therefore, this study examines the transformational process while it is taking place, while participants are experiencing the transformational process. Further, as mentioned the study explores a non traditional learning context for transformational learning which is the GBL; and therefore the steps of the transformational process will be represented in the form of a game.
The study focuses on inducing only the first six steps of the transformational process, which can be realised in short time. The output of these six steps is a planned course of action after exploring the unhealthy limiting assumptions and exploring other options. While the implementation and integration of this plan remains outside the scope of the study. The study also focuses on inducing transformational learning for burnout employees as they can benefit from this kind of meaningful learning.

**Purpose of the study**

To sum up, The current study comes from a pragmatic paradigm with the aim of inducing transformative learning in GBL environment using reflection triggers and a facilitator or a coach to engage participants in self critical reflection and discourse. This is done while taking into account the burnout context of the learners. To achieve that, first the study will design and develop an innovative collaborative board game that induces transformational learning. Then the study will evaluate whether this intervention results in perspective transformation as defined by the transformative learning model of Mezirow.

**Research questions and hypotheses**

Based on the previously mentioned purpose the current study focuses on answering the following two research question:

1. *To what extent does inducing the first six steps of transformative learning using the designed board game and facilitated by a coach result in perspective transformation of the burnout employees?*

2. *To what extent do the reflective processes resulting from inducing transformation follow the reflective processes dictated by the first six steps of transformative learning?*

To answer these research questions the study is guided by six hypotheses that are based on the six steps of transformational learning. The first step is the disorienting dilemma, and it represents the experience that already took place in the participants’ past. Hence, this step will be substituted or mapped in the implementation as the participants’ descriptions of the disorienting dilemma. The following are the hypotheses to be tested when inducing the transformational process.
Hypothesis 1. It is hypothesized that:
   a. The first step includes storytelling, and reflection without examination of assumptions.

   b. The coaching role in the first step is to encourage the participants to start sharing.

Hypothesis 2. It is hypothesized that:
   a. The second step includes examination of the experienced feelings during the disorienting dilemma.

   b. The coaching role in the second step is to encourage and enable self reflection.

Hypothesis 3. It is hypothesized that:
   a. The third step includes critical reflection; examining what are the different assumptions, about the self, others, work, and also examining and questioning the sources and the circumstances that caused them.

   b. The coaching role in the third step is to encourage, enable reflection and challenge assumptions.

Hypothesis 4. It is hypothesized that:
   a. The fourth step includes conscious sharing of the discovered assumptions in the previous step to be liberated, and by conscious it is meant that the participants by then should be aware that it is an unhealthy limiting assumption that contributed to their dilemma.

   b. The coaching role in the fourth step is to reassure participants and encourage the sharing of the process.

Hypothesis 5. It is hypothesized that:
   a. The fifth step includes exploring healthy roles and assumptions as well as new actions individually and exploring roles, assumptions and action from the learning group and facilitator.

   b. The coach in fifth step is to encourage, enable reflections, and challenge the participant to explore.
Hypothesis 6. It is hypothesized that:
   a. The sixth step includes choosing actions from the explored in the previous step as well as planning how and when to execute them in the future.
   
b. The coaching role in the sixth step is to encourage, enable reflection and challenge to commit to a plan.

Research design.

To answer the research questions and examine the previously mentioned hypotheses an explorative case study design is adopted in this study to help assessing and evaluating how the game implementation induces transformative learning by investigating the participants’ transformational process while playing the different phases of the game. (Yin, 2003)
3. Method

This chapter is divided into two main parts. First, the design and development procedures and details of the implemented board game. Second, the methodological details of the explorative case study.

Game design and development

Design

The game design is mainly based on the concept of discourse or reflective dialogue, to guide the players through the critical self reflection process and develop the players’ reflective awareness. Reflection triggers are strongly used as guidelines for the development of reflective exercises. The target group of the game are burnout employees or those who experience similar symptoms, therefore the game is also focused on reflecting on burnout experiences, feelings and sources. Further a physical board is chosen for the game form, and therefore board game design element should also be considered as design guidelines for game development and construction. Based on the previously discussed detailed theoretical framework, the main design requirements and specification are presented below.

Design requirements. First regarding the content design, the game should include and capture the details of the first six steps of the transformational learning model, specially the details of the third step; the critical examination of assumptions, since this is considered the core of the reflective and transformational process. The game should also integrate the feelings experienced during burnout as well as the sources of burnout to the steps of Transformational learning. The steps should be presented as practical exercises that induce transformational learning as defined by the first six steps. Therefore, the six steps can further be split into more steps if needed to support more practical and thorough exercises. The game should also foster reflection in general and use reflection triggers to achieve that. Further, the game should support group learning, discussions, interaction and sharing as well as feeling of togetherness. The game should provide sense of engagement, action and fun or joy.

Second regarding the graphical design, the game should foster the feeling of safety and help participants feel at ease, relaxed, comfortable as well as joyful. The game design should support four players. The graphical design should also reflect the transformational learning steps as a developmental process in which player need to progress through. Further, design should promote reflection and feeling of togetherness and connectedness.
**Design specification.** As mentioned in the theoretical framework the game design guidelines are based on the game design atoms model by Brathwaite and Schreiber (2009). The first atom is the players, avatars and game bits. Players are the game actors who set game in motion, and they represented with either avatars, tokens or pawns, while the game bits are the physical items required to play the game like cards, dice, coins, soldiers. The second element is the game mechanics which represents the game rules and how it works. Then, the game dynamics, which is the pattern of play that emerges when playing with the defined rules, for instance whether it is keep racing till the end game, chasing game, or acquisition game. Another important element is the game goals, mission or quest. Also, the game space, which is the area where the playing takes place. While, the game state or game view resembles a snapshot of the game space after a game move. Finally, the game theme or setting, and it refers to the story line or the context in which the game happens.

Regarding content design, the game design atoms namely storyline, objective, mechanics, dynamic, avatars and gamebits are used to specify how the mentioned requirement should be translated into a developed board game.

Regarding graphical design: the design should use bright colours, relaxing pictures, use of common group path, individual transformational paths and a final common destination point connecting all the individual transformational paths. The design atom or element “game space” should specify how the previous aspect are integrated in a cohesive implementable design.

**Construction and Development**

This sections explains how the design requirement and specification are mapped to the actual board game. It is worth noting that the details of the exercised representing the six phases of transformational learning were discussed and further tuned in coordination with a practicing coach to ensure their practicality.

First, the storyline or game theme design element is chosen based on the fiction and metaphor reflection trigger to foster reflection by relating to the given story. The story is about a girl whose father went to the war and left her some messages that she needs to follow in order not to be lost alone without him. The story is represented by a card that the participant should read in the beginning of the game. The card reads as follows:

*Back in 1939, he left her the first message “Sweetheart, it’s the call of duty...I’m going to war. But I’m not leaving you behind, I will take good care of you. I have something for you, it is what you need, and you will find it in the right time. Just follow my messages.”*
Second, the goal or objective is to help the girl find the messages in the right time and solve their mystery to arrive and be safe home. The objective is also based on the metaphor reflection trigger, indicating that there is an explorative journey or a path that the participant need to go through together to arrive safely to new and comfortable place that is the new healthy perspective.

Third, mechanics or rules; all players play in turns and together they should get enough score to enter the “New Message” stop. Each new message represents a phase in the transformational path, and therefore the each player should progress one phase in the individual transformation path when they group gets a new message. The mechanics are devised in way that links the actions players do to progress in the game to the meaningful learning experience or the transformational process, which will be presented later in the form of exercises. These rules are translated into some chores that the players should do, like throwing dice, moving avatars, cards’ dealing, arranging, reading, and writing in reflective journals which can be regarded as bookkeeping activity.

Fourth, the game space; the area in which the playing takes place is mainly an adaptation of the a previous design (see Figure 1). It consists of a circle that has an outer path path

![Figure 1. The developed game space](image-url)
positioned on its circumference. The outer path is the collective group path, and it is formed of several stops with bright colours to promote openness as well as joyful and playful experience. These stops represent fun and reflective stops called miscellaneous actions, which will be described in the following paragraph. Four “New Message” stops divide the outer path into four equal arches. The inner circle space is also divided into four equal parts by four individual paths consisting of eight phases of transformation. These four paths meet at the final destination or endpoint represented by a picture of a home at the center of the circle. Further four parts of the inner space are filled with four different symbolic pictures. The four pictures are chosen as follows: trees: to promote the feeling of relaxation and growth, a bright path: to promote relaxation and as if the players are walking a journey of reflection and enlightenment, connected hands or people: to promote the feeling of togetherness throughout the journey, and puzzle pieces: to promote the players’ feeling of exploring and finding the missing pieces of themselves.

Fifth, the adopted dynamics is chasing, in which players chase after a new message to keep progressing in their individual transformational paths (Brathwaite & Schreiber, 2009). Also another dynamic used in this game can be described as progressing towards the final destination, in which players keep moving till reaching home safely. During this chasing players come across different actions or miscellaneous stops that they need execute to proceed in their path. The miscellaneous game actions not only serve as fun and interactive breaks between the main phases, but also some actions promote reflective skills being based on reflective triggers. There are six miscellaneous actions all of which promote group discussions (see Figure 2).

*Figure 2. The six miscellaneous action cards*

They include the “Guess” actions which are riddles for fun and mystery purpose, the “Alike” which are actions for exploring common things between players like finding a common thing that they all like. Also the “Inspired” actions which consist of inspirational quotes, being
based on the metaphor reflection triggers players are supposed to relate to these quotes and reflect on their experience. The “Tips” actions are about giving advice on a specific topic for instance gardening, cooking or sightseeing, and their purpose is to increase interaction and group discussion. While “If I” actions uses the metaphor reflection trigger in which they are hypothetical situation that foster imagination, reflection, group discussion, and also joy due to the fun nature of some of the situations. Finally, the “You” actions in which the players share something about themselves and they are based on the concept of storytelling to trigger reflection. (see Appendix E).

Sixth, avatars and game bits included one group progress token/avatar to use for the common group path, 4 individual avatars for players to progress in their own transformational paths, a dice, several cards, envelopes, balloons, other resources like reflective journals are used.

Seventh, The game state or game view, includes the game space with the group avatar placed on one of the outer path stops. While the four players’ avatars are placed on one of the phases of the transformational paths. A dice is may be present in the middle of the space, while there are some cards scattered in different places on the board (see Figure 3)

![Figure 3. Game view after finishing the first phase.](image)

**Transformation Phases Description.** The first six steps of TL were further broken into eight phases. Step three in Mezirow’s model, the critical examination of assumptions is divided into two phases, to examine the assumptions first then their sources and they are two consecutive phase in the game (phase three and four). Further, the fifth step in the model exploring new assumption, roles and relationships is divided into two phases, first exploring new perspective
individually and with others, then others positive perspectives. These two phases were separated by another phase between them (see Table 4). After each game phase the participants are asked to reflect in their reflective journals that are guided by few open ended questions. Following is a detailed description and rationale of the eight phases.

Table 4  
*Overview of the translation of Mezirow’s first six steps into game phases and exercises*

<table>
<thead>
<tr>
<th>Mezirow’s Steps</th>
<th>Game Phases</th>
<th>Exercises</th>
<th>Expected reflective process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disorienting Dilemma</td>
<td>The Deja Vu: 1</td>
<td>-Pictures</td>
<td>Storytelling, reflection without examination of assumptions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Mirror</td>
<td></td>
</tr>
<tr>
<td>Examining Feelings</td>
<td>The Baggage: 2</td>
<td>-Feelings intensity</td>
<td>Examination of the experienced feelings during the disorienting dilemma</td>
</tr>
<tr>
<td>Critical examination of assumptions</td>
<td>The Mismatch: 3</td>
<td>-Defining success</td>
<td>Critical reflection: examining what are the different assumptions, about the self, others, work, and sharing them</td>
</tr>
<tr>
<td></td>
<td>The Timeline:4</td>
<td>-Timeline</td>
<td>Critical reflection: examining and questioning the sources and the circumstances that caused them,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Liberation</td>
<td></td>
</tr>
<tr>
<td>Sharing Transformation</td>
<td>The Companionship: 5</td>
<td>-Forming a sentence</td>
<td>Conscious sharing of the transformational process</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploring new roles</td>
<td>The Birdview: 6</td>
<td>-Chairs</td>
<td>Exploring healthy roles, assumptions, actions individually and from others.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-Exchanging advices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Gift: 8</td>
<td>-Throwing gifts</td>
<td>Exploring healthy roles, assumptions</td>
</tr>
<tr>
<td>Planning course of action</td>
<td>The Anchor: 7</td>
<td>-Anchoring actions</td>
<td>Prioritizing and choosing actions, making action plan</td>
</tr>
</tbody>
</table>

**Phase one “The DeJa Vu”**. This phase maps to the experience step or the disorienting dilemma. Since the experience is something in the past, and since starting with feeling examination and critical reflection steps (the next steps) is not easy or needs a preparation step, encouragement and stimulation. The aim of this step in the tool is to get the participants acquainted with the reflective dialogue or discourse as a warming up to encouraging them further.
to speak about the difficult experience and the associated thoughts. It is not intended to be just a simple story telling exercise, but rather a first step to start stimulating self-reflection and self-understanding through talking about feelings, assessment of experience. This is achieved through two exercise, that depend on the concepts of photo elicitation and storytelling as reflection triggers, but each is implemented in a different way.

Pictures exercise: The participants are given three symbolic pictures or shadows of a person who is sad, indifferent, and happy (see Figure 4). The happy and said feelings were chosen because they are simple feelings that can express how a person feels before and after experiencing a dilemma. While the indifferent feeling is chosen because it results from the burnout experience and therefore is a symbol to the participants’ specific disorienting dilemma. Then they are asked to arrange them, and explain why. Then they are asked if this order matches their experiences, if not they should re-arrange them to match their own experience and then explain their choice and reflect.

Mirror exercise: This is a quiet exercise to help participants start listening to the voices and thought within, and try to make sense out of it and then speak it out. Instead of using real pictures of the individuals a mirror was used since it provides a more creative and interactive way of communicating with yourself. Participants are asked to hold the mirror and look into it for two minutes, and try to listen to the voices in their heads. After the two minutes they are asked to reflect on how they felt and on the thoughts that came to them while looking in the mirror.

Phase two “The Baggage”. This phase maps the second step of examining feelings of shame and guilt and anger. Feelings of shame and guilt were considered very primitive and deep feelings, feelings experienced during burnout were used in the tool instead, so that participants can relate more easily to them. These feelings are: Frustration, Anger, Anxiety, Sense of ineffectiveness, Overwhelmed, Distant, Taken for granted, Feeling of aggression, Feeling of intolerance, Feeling of injustice, Powerlessness, Indifferent, Exhausted, Threatened,
Uncomfortable and Unappreciated. Each of the feelings is presented in three colours (yellow, orange, red) to indicate the intensity or the frequency of the examined feeling.

Feelings intensity exercise: The participants should choose the feelings the they can relate to the most with the experienced intensity represented in the chosen color of the feelings, they participants should limit these feelings to the most urging ones and reflect on them (see Figure 5). After reflection participants should keep these feelings in an enveloped and wear it as a necklace to so that they develop more awareness of the negative feelings experienced to try free themselves from them later in the game.

![Figure 5. Exhausted feeling represented in three different intensities](image)

**Phase three “The Mismatch”**: This phase maps to the third step of critical examination of assumptions. The phase used the six elements of the perception of work environment as defined from the burnout literature. These six mismatches between the individual and organization are represented in ten sentences.

Defining Success exercise: players are presented with a card that says: “Success is…”, then are asked to choose from the ten statements what they think success is (see Table 5). Based on their choices, the participants start to reflect on what each choice means to them and examine the related assumptions about the work, other, their own lifestyle and behaviour as well as assumptions about the self.

<table>
<thead>
<tr>
<th>The mismatch</th>
<th>sentences</th>
</tr>
</thead>
<tbody>
<tr>
<td>WorkLoad</td>
<td>Going the extra mile and working extra hours to meet tight deadlines</td>
</tr>
<tr>
<td>Control</td>
<td>Being able to decide how to get my job done</td>
</tr>
<tr>
<td>Reward (moral, financial, social)</td>
<td>Having pride in doing something of importance, doing it well and enjoying it</td>
</tr>
</tbody>
</table>
Having a financially rewarding job
Being appreciated for what I do.

Community
Integrating smoothly in the work community.
Goes hand in hand with a supportive work environment
(supervisor/colleagues)
Goes hand in hand with a support system of family and friends.

Fairness
Being in good terms with the right people in the organization

Values
Finding a job that is aligned with my own values

---

**Phase four “The Timeline”.** This phase also maps to the third step of the transformational model. The aim of this phase is to examine and link the sources of the unhealthy assumptions.

The timeline exercise: players are asked to draw the timeline of their lives and divide it into positive upper half and negative lower half. Then they are asked to fill it with their people, events, songs, books and movies that impacted them positively or negatively throughout their childhood, teenaging till the present time. Then they are asked to reflect on what they drew. The following are the cards are given to the players.

Recall the events that impacted you the most positively/negatively passing through your childhood,
       teenaging,
       Present.

Recall the people that positively/negatively influenced your childhood,
       teenaging,
       Present.

Recall the movies, songs and books that impacted you the most.

What are the events that trigger this assumption about yourself
Can you find a link between the assumption and the previous?

The liberation exercise: This is a symbolic exercise to help the participants imagine that they can get rid of the discovered negative unhealthy feelings and assumptions related to their experience. In this exercise the participants are given each a balloon. They are asked to write the most bothering assumption they discovered about themselves, a symbol or a source of this assumption, then blow air into the balloon with all the negative feelings they relate to this assumption and then blow it off with a pin. Then they were asked to take a look in the negative
emotions, the cards they kept from phase two and then tear them all up and try to explore and find what positive emotions they want to feel in replacement of the negative ones.

**Phase five “The Companionship”.** This phase maps to the fourth step of the transformational model. In this phase participant share their common experience after examining the assumptions and their deeply rooted sources. The aim of this phase is to reinforce the feeling of togetherness in the journey of transformation and encourage overcoming this unhealthy assumption by sharing the experience transformation so far to further progress in the process of transformation.

Forming a sentence exercise: players are given a set of words and are asked to arrange them to form a statement. Then they are asked to reflect on it.

“*It is our Light, not our darkness that frighten us the most...*”

**Phase six “The Bird View”.** This phase maps to the fifth step in the transformational model, and it aims at exploring the different roles and actions after realising the unhealthy assumptions and questioning them. This is achieved by two means, first exploring other perspectives individually, and second exploring others’ advised perspective or new roles. This phase is considered the first phase in the new direction of change and transformation based on what the participants learnt about themselves in the previous phases. This phase needs some courage from the participants, to start consciously exploring other options to make their lives better and it is expecting to be challenging since the participants have burnout experience which makes them feel exhausted and not wanting to act. The following exercises were designed to solve that.

Chairs Exercise: the chairs exercise is implemented in this phase and it makes use of the concept of role playing as a reflection trigger. Each player is asked to explore three different perspective by physically sitting on their different chairs; oneself, the group and the coach. In each chair the player sits and try to imagine and explore the chair owner’s perspective, possible new roles and actions. The physical movement of changing and sitting on different chairs is intended to encourage the participants mental state to take action subconsciously matching their physical action. Also to ease the fear of exploring new actions and roles.
Exchanging advises exercise: participants in this exercise are asked to write to each other advices or comments about what they think they can do, and then exchange them. Then they are asked to share what they receive if they want to.

**Phase seven “The Anchor”**. This phase mapps to the sixth step of the transformational model, and it aims at helping the players to choose one action based on the explored in the previous phase, then plan how to execute this action and commit to this plan.

Anchoring actions Exercise: Choosing one action or role from the previously explored ones and coming up with a simple plan including defined time frame and circumstances needed to achieve this action, and then write it down.

**Phase eight “The Gift”**. This phase also maps to the fifth step in Mezirow’s model, in which one explores new assumptions, role and actions. The aim of this phase is to allow the participant to explicitly explore what the others think of them and their positive qualities.

Throwing gifts exercise: each player sits silently in front of the group and accept a gift of positive thoughts or qualities about him/her, while the group keep throwing him/her with what they think are his/her positive qualities. Afterwards they are asked to reflect on this experience. This was chosen to be the final game exercise to end the transformational experience with a positive energy and hope that others might be seeing one’s good qualities but we don’t realize it, so the sharing changes that.

**Methodological details**

**Sampling Strategy and sample description**

The study used convenient sampling from the University of Twente in the Netherlands employees population, in which four Dutch individuals participated in the research through self report of burnout symptoms. The sample included one male participant and three female participants, with ages ranging from 5. The four participants have different occupations; two of which are from the scientific staff, while the other two are from the supporting staff.

**Data collection instruments**

In this mainly qualitative research, data collected using four mixed instruments; digital survey, group discussion based on open ended paper-based questions, reflective journals, and audio recording.
First, burnout is measured by the Maslach Burnout Inventory-General Survey (MBI-GS) (Maslach et al., 1996), which is the most widely used instrument in research for measuring burnout on a non-profession related scale (Maslach et al., 2008). It consists of three subscales to assess the three different dimensions of burnout using 16 items in total measuring that are scored on a seven point likert scale, ranging from 0 “Never” to 6 “Every day” (Maslach et al., 1996). The exhaustion subscale contains 5 items such as “I feel used up at the end of the workday”. The cynicism subscale also contains 5 items such as “I just want to do my job and not be bothered”. While the professional efficacy subscale contains 6 items such as “I feel I am making an effective contribution to what this organization does”.

Second, group discussions based on paper-based questions were used for participants to reflect on their work experience before and after playing the game. Third, reflection journals during the game, to reflect after each phase of the game. The reflective journals are also guided with open ended questions that stimulate reflection. Fourth, audio recordings of the different phases of the game as well as recording of group reflection discussions before and after the workshop. It includes the participants’ answers of the group discussion questions and reflective journals since the participants share what they write. The audio recording was used in order not miss any discussions and to capture the full game experience.

Procedures and ethical concerns

The announcement of the workshop is coordinated with the HR department of the university of Twente. An invitation to the workshop is put on the employee portal of the university. The invitation clearly indicates that the workshop is part of master thesis research and addresses confidentiality and anonymity of collected data. It also provides detailed information about the workshop as well as a link to an online signup form. The workshop has 4 to 8 participants, and consisted of warm up lunch and one and half day to implement the intervention. The intervention is monitored by two specialist(s) at different times. The coach or facilitator role is conducted by a certified practitioner, while the researcher is present for explaining the research, monitoring and providing help if needed.

Before starting the research an approval from the university ethical committee is obtained. Registered participants, are then invited to a warm up lunch during which icebreaker games are played and the goal of research, confidentiality issues, and workshop timeplan are explained. The warmup end with signing the research formal consent forms. The warm up session lasted for one hour.
Before attending the first day of the workshop participants are asked to fill the MBI-GS online survey to measure burnout level. Each participant is given a code to use for the survey and for debriefing. The first day starts with a short ice-breaking exercise, then the participants engage in a discussion about the personality traits and work after filling Personality traits survey. This discussion aims at fostering group discussions with a general work-related topic that is not related to burnout in order to build the required safe environment for reflection. The participants are then asked for permission for audio recording during the rest of the day and the following day. After that the participants fill the first group discussion questions and the answers are shared. Then the first part of the game that guides participant through the process of critical reflection starts. After each phase of the game participants use reflective journals to reflect back on their experience during this phase. The first day lasted for around six hours and half.

Before the start of the second day, one of the participants decided to withdraw from the workshop. As the participant excused his/herself and explained that this is due to unmet expectations of the workshop.

During the second day, participants play the rest of the game and fill another group discussion questions that consists of the same questions as the first one. Then they are asked to compare between the before and after questions and share their insights. The second day lasted for around three hours and half. During both days, coffee and lunch breaks are taken each one and half hour.

All collected data during the research are considered confidential and stored anonymously using the participant's code.

Data analysis

Statistically, cut-off points “low”, “average”, and “high” that are defined by the MBI-GS manual were used to calculate MBI-GS scores and determine the burnout level (Schaufeli et al., 1996). Digital audio data of approximately 495 minutes length is transcribed in around 110 pages, then coded with other qualitative data and analysed using the qualitative data analysis software ATLAS.ti.

A coding scheme was developed by researcher. The scheme is a combination of constant comparative analysis to find matches of codes that are based on defined concepts from TL and game interactions, and inductive method or open coding to allow codes and themes to emerge from data (Derry, 2007). The open coding resulted in adding new codes and categories related to the transformational process, like the coaching role codes, as well as modifying the operationalizations of some codes. The open coding also showed more explicit details or layers to the concepts already defined in the transformational model (See Appendix A).
The audio data was the primary source of the codes and was complemented in some parts from the reflective journals if they have extra information that was not shared during the sessions. This is because participants write in their reflective journals after each phase of the game, then these reflections are shared with the group and therefore they are recorded in the audio data. Nevertheless it was noticed few times that one of the participant’s reflective journal included more data than the what he/she shared.

Regarding the coding process, first audio data is divided into units of uninterrupted speech. Nevertheless, the basic analysis unit is one instance of coded concepts rather than uninterrupted speech. More than one instance can be found in an uninterrupted speech, so the speech may be coded with more than one code. While more than one speech may refer to the same instance and therefore coded to the same code instance. Below is an example of how one uninterrupted speech is coded into two coding instances:

Researcher: and what if u r not able to finish it (phd)?
Case 3: it doesn’t look well on my CV...
Coach: who cares?
Case 3: my future career...I want to...have a career

In other words: The participants meant in the first part of the last sentence that: my future career will be affected if I didn't finish my phd which is coded as an assumption about work, and then the participant meant in the second part that: I want to finish because I want to have a career, which is coded as an assumption about own needs or wants or life style.

Instances from transformational process are grouped into six categories. Five categories map the steps from two to six of the transformational learning model, while the first step “the disorienting dilemma” in the model is already experienced by the participant. The five categories are: examination of feelings, critical examination of assumptions, sharing of assumptions, exploring new roles and planning new actions and roles. The sixth category; non-critical reflection refers to reflecting without critical assessment of assumptions (see Table 6).

Table 6
A shortened version of the codes and categories of the used coding scheme (see Appendix A)

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non critical reflection</td>
<td>Projecting experience</td>
</tr>
<tr>
<td></td>
<td>Story telling of experience/ dilemma</td>
</tr>
<tr>
<td></td>
<td>Self reflection on own lifestyle or habits or thoughts</td>
</tr>
<tr>
<td></td>
<td>Reflective action</td>
</tr>
<tr>
<td>Feelings examination (Mezirow, 1978)</td>
<td>current feelings</td>
</tr>
</tbody>
</table>
negative feelings associated with experience
positive feelings associated with experience

Critical Examination of assumptions and sharing (Mezirow, 1978)
- Assumption about others/ the world/ work
- Assumption about own deeds/actions/habits/behaviours
- Unconscious voice of unhealthy assumption about own self
- linking sources to feelings/ experiences/ assumptions
- linking sources to the unhealthy assumptions about self
- Sharing unhealthy assumption about Self

Exploring new roles (Mezirow, 1978)
- Exploring: alternative empowering/ healthy feelings (individually)
- Exploring: new actions/ roles/ healthy assumptions (individually)
- Exploring: new actions/roles from other participants
- Exploring: Other’s positive assumptions

Planning (Mezirow, 1978)
- Planning/ Committing to a new perspective actions

Coaching (emergent codes)
- Probing
- Questioning assumptions
- Seeking clarification/ Encouraging sharing reflections/ Acknowledging
- Explaining exercise
- Perspective taking: Coach’s or researcher’s perspective
- Participant as a coach

Game Interaction (Xu, et al., 2011)
- Chores
- Commenting on a game play or move
- Jokes and laughs
- Strategy
- Out of game

Interaction and social engagement codes were based the five categories developed by Xu et al. (2011) who studied the way players interact in board games. First, the chores which refer to the interactions and work the players do to progress in the game. These include updating status manually, moving tiles or tokens, throwing dice, keeping or exchanging physical elements, reading cards. Second, reflection on the gameplay, which refers to the interaction after a game move. Third, strategies, which refers to discussing the next move, agreeing on action or game
decision. Fourth, out of game interaction, or discussing irrelevant subjects. Finally, commenting or joking on the game itself and its content.

Assessing reliability of coded data is achieved by interrater reliability using raters agreement percentage. The workshop’s coach coded 44 instances of the data transcribed in four pages and included all the different coding categories. The rating achieved an agreement ratio of 0.73 and Cohen’s kappa coefficient of $K = 0.69$ without following the coach’s coding process with any discussions between the two raters. This interrater reliability was considered substantial due to the explorative nature of the study.
4. Results

In this chapter the results of the explorative case study is presented. Results include MBI-GS, qualitative analysis of the coded instances during the game implementation.

**Burnout level**

Results of the MBI-GS showed that overall three participants reported high levels of burnout, while one participant reported moderate level (see Table 7). Case 1 results indicated a high overall level of burnout. Case 2 results indicated a high overall level of burnout. Case 3 results indicated a moderate overall level of burnout. Lastly case 4 results showed a high overall level of burnout.

<table>
<thead>
<tr>
<th>Code</th>
<th>Exhaustion</th>
<th>Exhaustion Level</th>
<th>Cynicism</th>
<th>Cynicism Level</th>
<th>Professional Efficacy</th>
<th>Professional Efficacy Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>BW_011</td>
<td>27</td>
<td>High</td>
<td>20</td>
<td>High</td>
<td>22</td>
<td>Low</td>
</tr>
<tr>
<td>BW_012</td>
<td>28</td>
<td>High</td>
<td>5</td>
<td>Low</td>
<td>16</td>
<td>Low</td>
</tr>
<tr>
<td>BW_013</td>
<td>6</td>
<td>Low</td>
<td>8</td>
<td>Moderate</td>
<td>26</td>
<td>Moderate</td>
</tr>
<tr>
<td>BW_014</td>
<td>14</td>
<td>Moderate</td>
<td>12</td>
<td>High</td>
<td>13</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Qualitative overview**

In this section qualitative results of different aspects of the game's implementation and transformation process are presented. Results of the game phases implementation, participants contribution or transformational instances, game interactions and coaching roles are presented. As explained in the method section, one of the participants withdrew after the first day. Therefore, results of the participants’ contribution represents the contribution of the four participants till the middle of the fourth phase of the game, while the results of rest of the phases represent the contribution of the three participants who completed the workshop. The following section will present the detailed results of each phase.
Table 8

*Overview of the participant's contribution of the overall transformational coded instances*

<table>
<thead>
<tr>
<th>Game Phase/Case no.</th>
<th>case_1</th>
<th>case_2</th>
<th>case_3</th>
<th>case_4</th>
<th>TOTALS</th>
<th>Approximate net time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase_1</td>
<td>9</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>31</td>
<td>37 min</td>
</tr>
<tr>
<td>Phase_2</td>
<td>30</td>
<td>29</td>
<td>19</td>
<td>24</td>
<td>102</td>
<td>118 min</td>
</tr>
<tr>
<td>Phase_3</td>
<td>41</td>
<td>39</td>
<td>73</td>
<td>55</td>
<td>208</td>
<td>112 min</td>
</tr>
<tr>
<td>Phase_4</td>
<td>19</td>
<td>30</td>
<td>12</td>
<td>27</td>
<td>88</td>
<td>92 min</td>
</tr>
<tr>
<td>Phase_5</td>
<td>1</td>
<td>1</td>
<td>N/A</td>
<td>1</td>
<td>3</td>
<td>7 min</td>
</tr>
<tr>
<td>Phase_6_7</td>
<td>30</td>
<td>37</td>
<td>N/A</td>
<td>26</td>
<td>93</td>
<td>54 min</td>
</tr>
<tr>
<td>Phase_8</td>
<td>2</td>
<td>2</td>
<td>N/A</td>
<td>2</td>
<td>6</td>
<td>17 min</td>
</tr>
<tr>
<td>Game TOTALS</td>
<td>132</td>
<td>145</td>
<td>111</td>
<td>143</td>
<td>531</td>
<td>437 min</td>
</tr>
<tr>
<td>After Game Reflection</td>
<td>6</td>
<td>4</td>
<td>N/A</td>
<td>7</td>
<td>17</td>
<td>10 min</td>
</tr>
<tr>
<td>TOTALS</td>
<td>138</td>
<td>149</td>
<td>111</td>
<td>150</td>
<td>548</td>
<td>447 min</td>
</tr>
</tbody>
</table>

*N/A: data is not available due to the withdrawal of case 3.*

Regarding the implementation time (see Table 7), overall the game was executed in approximately 437 minutes excluding time taken after each for the reflective journals. The second, third and fourth phases were had the longest execution time 118, 112, 92 minutes respectively, while the fifth phase had the shortest execution time of 7 minutes. The sixth and seventh phases of the game were implemented together during the workshop.

Overall the four participants contributed with 584 instances related to the transformational process throughout the eight phases of the game. The six categories non-critical reflection, examination of feelings, critical examination of assumption, sharing of assumptions, exploring new roles, and planning and committing to new actions and roles with their sub codes are all represented in these instances (see Tables 9, 10, 11, 12, 13, 14). All the three participants who completed the workshop have very near amount of contributions of reflective instances (see table 8). Nevertheless some of the participants showed more awareness and readiness to the transformational process and exploring more about themselves than others, as will be detailed later using examples.
### Table 9
**Non-critical reflection coded instances**

<table>
<thead>
<tr>
<th>Non critical reflection: Projecting; current reaction/giving opinion or view about something</th>
<th>Non critical reflection: Story telling of past experience/dilemma</th>
<th>Self reflection on own lifestyle or habits or thoughts</th>
<th>Reflective action</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>85</td>
<td>35</td>
<td>91</td>
<td>1</td>
<td>212</td>
</tr>
</tbody>
</table>

### Table 10
**Feeling examination coded instances**

<table>
<thead>
<tr>
<th>Examining current feelings</th>
<th>Examining negative feelings associated with experience</th>
<th>Examining positive feelings associated with experience</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>24</td>
<td>9</td>
<td>55</td>
</tr>
</tbody>
</table>

### Table 11
**Critical examination of assumptions coded instances**

<table>
<thead>
<tr>
<th>Assump about others/ the world/work</th>
<th>Assumption about own deeds/actions/ habits/behaviours</th>
<th>Unconscious voice of unhealthy assumption about own self</th>
<th>Linking sources to feelings/ experiences/assumptions</th>
<th>Linking sources to unhealthy assumptions about self</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>78</td>
<td>30</td>
<td>33</td>
<td>4</td>
<td>215</td>
</tr>
</tbody>
</table>

### Table 12
**Sharing unhealthy assumption about self coded instances**

<table>
<thead>
<tr>
<th>Sharing unhealthy assumption about Self (Conscious)</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

### Table 13
**Exploring coded instances**

<table>
<thead>
<tr>
<th>Alternative empowering/healthy feelings (individually)</th>
<th>New actions/ roles/ healthy assumptions (individually)</th>
<th>New actions/roles from other participants</th>
<th>Other's positive assumptions</th>
<th>Perspective_taking: Coach or researcher’s opinion/perspective</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>42</td>
<td>3</td>
<td>4</td>
<td>13</td>
<td>65</td>
</tr>
</tbody>
</table>

### Table 14
**Planning coded instances**

<table>
<thead>
<tr>
<th>Planning/ Committing to new perspective actions</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>19</td>
</tr>
</tbody>
</table>
During the game execution, the coach contributed with many coaching inputs (see table 13). The overall coaching instances were found to be 522. These inputs were different for each participant to meet their needs and match their emotional state. The coaching codes are mainly emergent codes. The coach probing instances was the most found. These are mainly coach inputs to help the participants reflect in general, assess and examine their feelings and assumptions. Questioning assumptions instances refers to challenging a specific assumption noticed by the coach. Other instances of encouragement and acknowledgement are also found a lot. Further the coach also offered the participants her own perspective at some moments as an alternative perspective. Moreover, few coaching contributions from some participants were noticed in different phases of the game. (see table 15).

Table 15

<table>
<thead>
<tr>
<th>Coaching roles coded instances</th>
<th>Coach probing</th>
<th>Coach questioning assumptions</th>
<th>Coach seeking clarification/ encouraging sharing reflections/ acknowledging</th>
<th>Coach/ Researcher explaining exercise</th>
<th>Perspective taking: Coach or researcher ’s opinion/ perspective</th>
<th>TOTALS</th>
<th>Probing from other participant</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>263</td>
<td>39</td>
<td>142</td>
<td>50</td>
<td>13</td>
<td>507</td>
<td>15</td>
<td>522</td>
<td></td>
</tr>
</tbody>
</table>

Regarding the game interactions, the participants interacted in different ways during playing the game as well as the final reflection that took place directly after the game. All of the five different codes were present. Many laughing moments were found, as well as many game chores were done throughout the game. Very few out of game interactions and discussions of irrelevant topics were also present.(see Table 16)

Table 16

<table>
<thead>
<tr>
<th>Game interactions coded instances</th>
<th>Chores</th>
<th>Commenting on gameplay</th>
<th>Jokes and laughs</th>
<th>Strategy</th>
<th>Out of game</th>
<th>TOTALS</th>
<th>After game</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>84</td>
<td>26</td>
<td>98</td>
<td>36</td>
<td>6</td>
<td>250</td>
<td>9</td>
<td>259</td>
<td></td>
</tr>
</tbody>
</table>

Detailed qualitative analysis per game phase

Phase one -The DeJa Vu-

The pictures exercise, is the first exercise in the transformational process. The participants briefly and indirectly explained or projected their work and life experiences by arranging three pictures; sad, happy and indifferent person, and telling the story of the person in
the pictures. All of the four participants interpreted the indifferent person picture as serious working person but not indifferent person, since the girl in the picture was wearing a suit. Then the participants were asked to rearrange the pictures to reflect their own experiences, some of the participant rearranged the pictures to tell their stories from different aspects, while others kept the same arrangement since it already reflects their story.

Case 1: “Yeah... it's a happy girl disco dancing during study time, nicely at work and currently not so happy”

Case 2: “Yeah I didn't thought of it as myself, but I just I see a person who is unhappy, and then there is a light bulb... plan, and then problem solved

Case 3: "I looked at it: at hours, I’m mostly at work, then I’m active and there have happened a lot last year, sometimes I get too many... and then I cry. But I have a good husband at home, so"

Case 4: "sometimes I'm minding over a problem, then having a eureka moment, then having success”

The participants were asked to rearrange the pictures again if the working person picture was an indifferent person, then they all rearranged them again. Then the participant were asked to do another exercise, the mirror exercise and reflect afterwards on what happened and what did they see in the mirror and hear in their heads.

Case 1: "get a rest, you deserve to be happy"
Coach: "What else"
Case 1: "Is it worth it all this trouble in your head"

Two of the participants indicated that it was not difficult to look at the mirror, focus on the thoughts following in their heads, while the other two said it was not easy.

Case 2: "Yes I avoided eye contact, but I’m not sure is because of the avoiding but I easily get distracted. I just stare at the label I stare at my earrings I stare at my necklace. That was the first minute, and then I made eye contact during the first minute I see myself smiling a little bit and when I make eye contact I look really into the soul of my eyes, then... I see emptiness, and yeah I was hoping to see sparkling eyes, but I didn’t see it"

Table 17.a
Non-critical reflection coded instances

<table>
<thead>
<tr>
<th>Non critical reflection:</th>
<th>Non critical reflection: Story telling of past experience/dilemma</th>
<th>Self reflection on own lifestyle or habits or thoughts</th>
<th>Reflective action</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projecting; current reaction/giving opinion or view about something</td>
<td>17</td>
<td>6</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

During this phase the participants’ reflection mainly fall under the non-critical reflection category. No examination of feelings, no critical examination of assumption, nor exploring and
planning codes were found in this phase (see Tables 17a). Reflections included projection of the participants experience without any assessment of the situation, for instance

"Yeah...it's a happy girl disco dancing during study time, nicely at work and currently not so happy"

Also included short instances of storytelling of the experience also without assessment of the story or examination of related assumptions.

"I looked at it: at hours, I'm mostly at work, then I'm active and there have happened a lot last year, sometimes I get too many...and then I cry".

Another non-critical reflection type found in this phase is the self reflection on the lifestyle, habits or thoughts but still without examination of related assumptions of beliefs.

Case 3: "Yeah maybe this (picture) should be in the front if I interpret it as thinking how should I start, how should I..., then looking mostly at my phd sometimes I also have it here...yeah...where do I start? And if I don't solve that, I'm doing nothing at my work I just look blank at my computer and I'm not productive that day. If that goes really wrong, if I don’t know where to start"

Further, one reflective action was shared by one of the participants after the mirror exercise. The reflective action is a planned action after a moment of reflection but without examination of assumptions or exploring options, or encouragement from coach. This is the only instance of reflective actions found throughout the game.

Case 1: "Yeah. I got an idea may be I should go camping for three days or so, just by myself, relaxing and reflecting. It would be a good thing... i think a good idea"

The coaching input in this phase was mainly probing and encouragement, as well as explanations for the game as a whole and the specific exercises, which also include some action stops exercises (See Table 17.b). Regarding the game interactions, The participants did some chores also like throwing the dices. moving the avatars and had some laughs and joking moments in this phase (see Table 17.c).

Table 17.b

<table>
<thead>
<tr>
<th>Coaching roles coded instances</th>
<th>Coach probing</th>
<th>Coach questioning assumptions</th>
<th>Coach seeking clarification/ encouraging sharing reflections/ acknowledging</th>
<th>Coach/ Researcher explaining exercise</th>
<th>Perspective taking: Coach or researcher’s opinion/ perspective</th>
<th>TOTALS</th>
<th>Probing from other participant</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19</td>
<td>0</td>
<td>13</td>
<td>9</td>
<td>0</td>
<td>41</td>
<td>0</td>
<td>41</td>
</tr>
</tbody>
</table>

Table 17.c

<table>
<thead>
<tr>
<th>Game interactions coded instances</th>
<th>Chores</th>
<th>Commenting on gameplay</th>
<th>Jokes and laughs</th>
<th>Strategy</th>
<th>Out of game</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>0</td>
<td>21</td>
</tr>
</tbody>
</table>
Lastly, this phase started to familiarize and ease participants into reflective dialogue, it was noticed the participants afterwards started to self reflect in the other game action like the “tips” action, that was not intended for stimulating reflection rather than sharing experiences and interacting more. They first mentioned their advice, and then reflected on what they normally themselves do regarding the topic of advice, what others around them do, and further started to assess what they do in comparison with others, and consequently suggested a reflective action. Example (health tip).

Coach: "We need tips about health, what do you advise us to do"
Case 2: "First thing comes to mind is exercise frequently, go outdoors frequently"
Researcher: "Is it something that you do?"
Case 2: "I force myself to do"
Researcher: "and it is working for you?"
Case 2: "It's working"
Researcher: Ok, so we want your own advice, so based on what you do, do you still advice the same? going out and exercising? what really works for you.
Case 2: "yeah both going out and outdoors and exercising, but exercises I force myself to do it I don't like it, but i still do it, yeah you feel better afterwards, and going out I should do more often"

Phase two -The Baggage-

Participants were asked to choose the cards that reflect their feelings and their intensity or frequency. Participants choses a lot of cards, then they were asked to limit them down to the most intense or urging feelings. They examined feelings associated with their experiences, mainly negative feelings and only one instance of positive feelings was found (see Table 18.b). Then the participant reflected on the chosen feeling, why did they chose them and when these feelings come. The common chosen feelings by the participant were exhaustion, sense of ineffectiveness, powerlessness, frustration, anxiety, overwhelmed and indifferent. Two of the participants choose a lot of red and some orange feelings intensities. One participant choose all feelings with orange intensities, and the last participant choose only one red feeling and the rest of the cards were yellow and orange.

Table 18.a

<table>
<thead>
<tr>
<th>Non-critical reflection coded instances</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non critical reflection: Projecting; current reaction/giving opinion or view about something</td>
<td>Non critical reflection: Story telling of past experience/dilemma</td>
</tr>
<tr>
<td>27</td>
<td>25</td>
</tr>
</tbody>
</table>
In this phase, no critical examination of assumption was involved. Participant used mainly storytelling and projection of experiences, they also self reflected and assessed what their current situation (see Tables 18 a,b).

Case 4: yeah i also I wouldn’t think it terms of failure, it is context yeah..things happen but also if u just say ...bad luck happens at some point it’s just a bruise in most cases it is for some people may be not...
I mean I’m in lucky position that its just a bruise
Coach: do u have any incidents that it was a tattoo
Case 4: no, no,no I count myself lucky but i don’t know about other people ...I’m not in a very poor situation generally

Also exploration of new roles and actions started to appear in this phase when the coach probed about the negative feelings and encouraged the participants to think about what they want to do regarding some of the feelings(see Table 18.c)

Coach: beside the load that u want to change what else that u want to change about your life?
Case 2; I could.. i would like to change to being able to accept certain situation or let things go.

The coaching input in this phase is more than the first, more probing and more encouragements. The coach started as well to challenge and question some assumptions. Also one participant started to engage in the discourse and ask another participant to say more about their experience (see Table 18.d). Interactions also increased and more laughs and jokes can noticed in this phases (see Table 18.e).
Table 18.d  
Coaching roles coded instances

<table>
<thead>
<tr>
<th>Coaching probing</th>
<th>Coach questioning assumptions</th>
<th>Coach seeking clarification/ encouraging sharing reflections/ acknowledging</th>
<th>Coach/ Researcher explaining exercise</th>
<th>Perspective taking: Coach or researcher’s opinion/ perspective</th>
<th>TOTALS</th>
<th>Probing from other participant</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
<td>5</td>
<td>41</td>
<td>12</td>
<td>1</td>
<td>101</td>
<td>0</td>
<td>101</td>
</tr>
</tbody>
</table>

Table 18.e  
Game interactions coded instances

<table>
<thead>
<tr>
<th>Chores</th>
<th>Commenting on gameplay</th>
<th>Jokes and laughs</th>
<th>Strategy</th>
<th>Out of game</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>2</td>
<td>28</td>
<td>10</td>
<td>1</td>
<td>63</td>
</tr>
</tbody>
</table>

Phase three -The Mismatch-

The participants were asked to choose what they think success is and then prioritise them. All the participant chose their first priority to be “Having pride in doing something of importance, doing it well and Enjoying it”. One participant chose “Goes hand in hand with a supportive work environment (supervisor/colleagues)” as the second priority, while The other three chose “being able to decide how to get my job done”. One participant chose “Goes hand in hand with a support system of family and friends” as a third priority, another chose “Goes hand in hand with a supportive work environment (supervisor/ colleagues)”, while the other two didn’t have a third choice.
In this exercise participants critically reflected about their work, behaviors, lifestyles and examined associated assumptions as well as they examined positive and negative feelings resulting from the assumptions (see table 19.c).

Table 19.a

**Non-critical reflection coded instances**

<table>
<thead>
<tr>
<th>Non critical reflection: Projecting; current reaction/giving opinion or view about something</th>
<th>Non critical reflection: Story telling of past experience/dilemma</th>
<th>Self reflection on own lifestyle or habits or thoughts</th>
<th>Reflective action</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>4</td>
<td>16</td>
<td>0</td>
<td>36</td>
</tr>
</tbody>
</table>

Table 19.b

**Feeling examination coded instances**

<table>
<thead>
<tr>
<th>Examining current feelings</th>
<th>Examining negative feelings associated with experience</th>
<th>Examining positive feelings associated with experience</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>8</td>
<td>6</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 19.c

**Critical examination of assumptions coded instances**

<table>
<thead>
<tr>
<th>assumption about others/ the world/work</th>
<th>assumption about own deeds/actions/ habits/ behaviours</th>
<th>Unconscious voice of unhealthy assumption about own self</th>
<th>linking sources to feelings/ experiences/assumptions</th>
<th>linking sources to unhealthy assumptions about self</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>66</td>
<td>61</td>
<td>22</td>
<td>0</td>
<td>0</td>
<td>149</td>
</tr>
</tbody>
</table>

Table 19.d

**Sharing unhealthy assumption about self coded instances**

<table>
<thead>
<tr>
<th>Sharing unhealthy assumption about Self (Conscious)</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 19.e

**Exploring coded instances**

<table>
<thead>
<tr>
<th>alternative empowering/healthy feelings (individually)</th>
<th>new actions/ roles/ healthy assumptions (individually)</th>
<th>new actions/roles from other participants</th>
<th>Other's positive assumptions</th>
<th>Perspective taking: Coach or researcher’s opinion/ perspective</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
After this exercise another exercise was introduced to help in probing more about the unexamined assumption about work, life, behaviour and find the deep unhealthy assumption about the self. This exercise was not initially planned or designed in the game, but the coach and researcher found that there is more to be explored. It was decided that it is better to do that with another exercise to assist the participants and avoid boredom and resistance of the mind if the coach kept probing in the same exercise using the same sentences the participants chose. Before starting the new exercise the participant were presented with a Tedtalk video about life challenges and growth to act as a nice refreshing and inspiring break before the new exercise. Then, the researcher explained the exercise and made the participants aware of its aim as well as its benefits an impact, and then asked them to consciously help the coach to examine the deep assumption. Participants were asked to write down the five things that bothers them most and order them. The coach used these points to probe more and find deeper unconscious assumptions. Table 20 shows details about each participant’s examined and shared assumptions.

Table 19.f

Coaching roles coded instances

<table>
<thead>
<tr>
<th>Coach probing</th>
<th>Coach questioning assumptions</th>
<th>Coach seeking clarification/encouraging sharing reflections/acknowledging</th>
<th>Coach/Researcher explaining exercise</th>
<th>Perspective taking: Coach or researcher’s opinion/perspective</th>
<th>TOTALS</th>
<th>Probing from other participant</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>97</td>
<td>31</td>
<td>40</td>
<td>7</td>
<td>2</td>
<td>177</td>
<td>11</td>
<td>188</td>
</tr>
</tbody>
</table>

Table 19.g

Game interactions coded instances

<table>
<thead>
<tr>
<th>Chores</th>
<th>Commenting on gameplay</th>
<th>Jokes and laughs</th>
<th>Strategy</th>
<th>Out of game</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

Table 20

Participants’ transformation process coded instances

<table>
<thead>
<tr>
<th>Category</th>
<th>Codes</th>
<th>case_011</th>
<th>case_012</th>
<th>case_013</th>
<th>case_014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non critical reflection</td>
<td>Non critical reflection: Projecting; current reaction/giving opinion or view about something</td>
<td>17</td>
<td>26</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Non critical reflection: Story telling of past experience/dilemma</td>
<td>16</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Self reflection on own lifestyle or habits or thoughts</td>
<td>32</td>
<td>25</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Reflective action</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Feelings examination</td>
<td>Examining current feelings</td>
<td>15</td>
<td>5</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
Examining negative feelings associated with experience
Examining positive feelings associated with experience
Assumption about others/the world/work
Assumption about own deeds/actions/habits/behaviours
Unconscious voice of unhealthy assumption about own self
Sharing unhealthy assumption about Self (Conscious)
sources of experiences and assumptions
linking sources to feelings/experiences/assumptions
linking sources to unhealthy assumptions about self
Exploring: alternative empowering/healthy feelings (individually)
Exploring: new actions/roles/healthy assumptions (individually)
Exploring: new actions/roles from other participants
Exploring: Other's positive assumptions
Planning/Committing to new perspective’s actions

N/A: data is not available due to the withdrawal of case 3

It was realised that after explaining the purpose of the second exercise, participants were able to reflect more deeply and examine rooted assumptions about the self. Participants who were ready to explore needed guidance on how to or what look for in their thoughts and head voices. This was also expressed by one of the participants and indicated in the planned action. The participant always indicated that desire for reflecting on the inner self but did not know how to do it.

“I would probably look up may be a course or something because I don’t know how to meditate or focus on yourself”

By the end of this exercise, three of the four participants critically examined assumptions about the self, while only two of them were able to consciously realise it and share it as their unhealthy assumptions about their own self (see Table 19.c, 20). Below is an example start with probing on participant’s personal problem and then the participants related it to the perception of work problem, and finally ended with finding and sharing the unhealthy assumption about the self.
It was noticed that the discovery of assumption about self impacted following reflection. For Case 1, after finding the unhealthy assumption about self, the participant started to reflect on it in the next parts for instances the “Get Inspired” quotes stop, the quote was “It isn’t the mountains ahead to climb that wear you out; it’s the pebble in your shoe”. The participant reflected as follows:

Coach so what do you think the pebble in your shoe is?
Case 1: I think it the noise that you carry with you at the back of ur head u actually dont notice its there but it’s there...laughing....
Coach: what is one voice in ur head u wish u never ever have heard of again? one voice in ur head that keeps talking and talking and u wish u would never hear it again,
Case 1: the voice that pulls you down
Coach: what exactly does it say?
Case 1: u just made me say it....laughing....u r nothing.

In this phase the first five of the six categories of the transformative learning were present but planning and committing category (see Table 19.a, b, c, d, e). A lot of critical examination of assumptions instances were found and a couple of Exploring of new role moments also appeared (see Table 19.e). The coaching input also kept up with this increase of critical examination, and a lot of probing, encouragement, acknowledgement, as well as questioning and challenging assumptions moments were found. Participants moments of probing others also increased in this phase (see Table 19.f). Concerning the game interactions, few game chores and laughing moments were also found (see Table 19.g)

Phase four -The Timeline-

In this phase the participants examined the different sources of their experiences and the different examined assumptions (see Table 21.c). Participants related many people, events, songs, books and movies to their positive and negative experiences. They were asked to put these sources on a timeline figure representing their lives from childhood to present with indication which sources had positive impact and which had negative impact. The three participants who participated in this exercise and the remaining one put a lot of different sources. They were able to link unhealthy assumptions about the self to their root and old source; only two of them expressed it explicitly and shared it consciously as the source, while the third mentioned it implicitly in the discourse and stated it explicitly in the reflective journal. This same participant also found it difficult to explicitly write some sources like family members, work colleagues for instances in the negative category though while reflecting the participant gave some indications that these sources might be perceived as having negative impact. Following is an example of how one of the participants were able to find the original source of the unhealthy assumption about the self
### Table 21.a

**Non-critical reflection coded instances**

<table>
<thead>
<tr>
<th>Non critical reflection: Projecting; current reaction/giving opinion or view about something</th>
<th>Non critical reflection: Story telling of past experience/dilemma</th>
<th>Self reflection on own lifestyle or habits or thoughts</th>
<th>Reflective action</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>17</td>
</tr>
</tbody>
</table>

### Table 21.b

**Feeling examination coded instances**

<table>
<thead>
<tr>
<th>Examining current feelings</th>
<th>Examining negative feelings associated with experience</th>
<th>Examining positive feelings associated with experience</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
</tbody>
</table>

### Table 21.c

**Critical examination of assumptions coded instances**

<table>
<thead>
<tr>
<th>assumption about others/ the world/work</th>
<th>assumption about own deeds/actions/ habits/ behaviours</th>
<th>Unconscious voice of unhealthy assumption about own self</th>
<th>linking sources to feelings/ experiences/ assumptions</th>
<th>linking sources to unhealthy assumptions about self</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>8</td>
<td>8</td>
<td>33</td>
<td>4</td>
<td>56</td>
</tr>
</tbody>
</table>

### Table 21.d

**Sharing unhealthy assumption about self coded instances**

<table>
<thead>
<tr>
<th>Sharing unhealthy assumption about Self (Conscious)</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
Table 21.e

Exploring coded instances

<table>
<thead>
<tr>
<th>alternative empowering/healthy feelings (individually)</th>
<th>new actions/roles/healthy assumptions (individually)</th>
<th>new actions/roles from other participants</th>
<th>Other's positive assumptions</th>
<th>Perspective_taking: Coach or researcher’s opinion/ perspective</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>14</td>
</tr>
</tbody>
</table>

After this exercise, the liberating exercise took place, the participants were given each a balloon. The three participants wrote the most bothering assumption they discovered about themselves, blow air into the balloon then blow it off. Then they took a look in the cards of negative emotions and tore them into very small pieces. After that they wrote a list of empowering positive feelings and roles which they want to have or feel instead of the negative ones.

Coach: would u plz share. the feelings that you replaced the new feelings..who would like to go 1st

Case 1: I can go... I wrote down calm, i wrote down presence not being nothing or hide ...happy , joyful, effective, honestly telling good and bad stuff to boss ...sometimes I only tell the good stuff and not the bad stuff and making myself clear to other people...the same do not hide...but it’s important.

Coach: ok great...

Case 2: first the old one and then the new, I replaced anger with positivity ...and distant with connected , overwhelmed yeah just being strong having strength, exhausted with energetic and frustration I just replaced with being relaxed, calm and letting things go, and sense of ineffectiveness I could not really find the right word or emotion but knowing what I want is what I wrote down.

What I recognise from Ansgar is that some people know what they want they have goal and unlike him when people say y dont u try yeah y not I never...haha..I don’t know what I want I just take one day at a time.

Coach: so good

Case 4: so I exhaustion ...i replaced by being awake, I don’t know which one exactly belong to what but...I have confidence because of anxiety , feeling engaged , sense of achievement, being in control and feeling involved.

This phase also as the previous one included reflective instance from the first five categories, excluding the planning new roles and actions one. (see Tables 19.a, b, c, d, e). The following is an example of exploring new perspective from one participant after discourse with coach who offered another perspective after reflecting on the liberating exercise.

Coach: so it’s a matter of perspective, yes bad is always going to be its art of life it’s part of the human experience you have to acknowledge but u don’t have to stop at it...it shouldn’t stop us because it’s a test with some people it’s like a barrier in the olympic where the jumper have to jump over it ...will u jump or will u just get stuck.

Case 2: yeah that’s really hard for and then I felt really frustrated ..ok it’s not gonna help me because I can not see it that way but the tearing up (tearing the negative emotions cards)I did feel like ok if the world will never be a paradise but I can change I can be a paradise that’s what I did feel...but yeah still it’s hard.
The coaching input included probing, questioning, explaining, encouraging as well as offering alternative perspectives. Participants also took the coach role in some moments and had a discourse with other participants in this phase (see Table 19.f). Regarding the game interactions, the participants joked and laughed, did some chores, has some comments on the game and a couple of discussion moments of irrelevant topics or out of game interactions took place (see Table 19.g).

Table 21.f

<table>
<thead>
<tr>
<th>Coaching roles coded instances</th>
<th>Coach probing</th>
<th>Coach questioning assumptions</th>
<th>Coach seeking clarification/ encouraging sharing reflections/ acknowledging</th>
<th>Coach/ Researcher explaining exercise</th>
<th>Perspective taking: Coach or researcher’s opinion/ perspective</th>
<th>TOTALS</th>
<th>Probing from other participant</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24</td>
<td>3</td>
<td>24</td>
<td>14</td>
<td>7</td>
<td>72</td>
<td>4</td>
<td>76</td>
</tr>
</tbody>
</table>

Table 21.g

<table>
<thead>
<tr>
<th>Game interactions coded instances</th>
<th>Chores</th>
<th>Commenting on gameplay</th>
<th>Jokes and laughs</th>
<th>Strategy</th>
<th>Out of game</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>16</td>
<td>7</td>
<td>23</td>
<td>7</td>
<td>2</td>
<td>55</td>
</tr>
</tbody>
</table>

Phase five -The Companionship-

This phase was the shortest phase, since it consisted of a simple reflecting exercise. The participants successfully arranged together a given set words to form the sentence “It is our light not our darkness that frighten us the most”. The each reflected on their examined assumptions and indicated that now they are aware that nothing is stopping them from taking actions to change their lives for the better except for the fear of change. The following is the participant's discussion to arrange the words and their reflection afterwards.

Case 1: this is the end ~pointing~
Case 4: there.~arranging cards~
Case 1 ; in the middle
~laughing ~
Case 2; us, its....
Case 4; ahhh ~arranging cards~
Case 2: it is our darkness...
Case 4: that frighten us the most
Case 1; yeah
Case 4; aha.
Case 1; that was easy yeah
Case 2: ah yeah.
Coach: ok ...so will u read it out loud please.
Case 2: reading: "it is not our light...
Coach: It is..
Case 2: it is our light not our darkness that frighten us the most
Coach: what do you think of that?
Case 2: I can recall to that because the darkness the negativity is what you are used to and it makes it comfortable and that’s really silly but that’s the way it works...so the light although u long for it u dont know it it’s uncomfortable yeah
Coach: very nice reflection, does anybody has anything to add may be from your experience today
Case 1: it’s the unknown ...that light for me it’s kind of ...something new
Coach: what about you ?
Case 4: yesterday she ~indicating case 3~ said she couldn’t see the light at the tunnel, I can see the light at the end of the tunnel but I’m just not really there ...sitting comfortably in the tunnel
~laughing all~
Case 4: may be because I’m more afraid of the light
Case 1: just the darkness...yeah
Coach: ok ...so please remember this
~All laughing ....and repeating "comfortable in the darkness"~
Coach: we are all comfortable in the dark
Researcher: because this is what u know as u said
Case 2 and Case 1: yeah
Coach: so plz remember this it’s our light not our darkness the frighten us the most...so let’s move on

Table 22.a
Critical examination of assumptions coded instances

<table>
<thead>
<tr>
<th>assumption about others / the world / work</th>
<th>assumption about own deeds / actions / habits / behaviours</th>
<th>Unconscious voice of unhealthy assumption about own self</th>
<th>linking sources to feelings / experiences / assumptions</th>
<th>linking sources to unhealthy assumptions about self</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

The fifth phase included only few instances of critical examinations of assumption (see Tables 22.a). Also few encouragement and acknowledgement moments from the coach as well as few interactions (see Tables 22.b, c).

Table 22.b
Coaching roles coded instances

<table>
<thead>
<tr>
<th>Coach probing</th>
<th>Coach questioning assumptions</th>
<th>Coach seeking clarification / encouraging sharing reflections / acknowledging</th>
<th>Coach / Researcher explaining exercise</th>
<th>Perspective taking: Coach or researcher’s opinion / perspective</th>
<th>TOTALS</th>
<th>Probing from other participant</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>
Phase six -The Birdview- and phase seven -The Anchor-

These two phases were executed together during the workshop because of the time constraint. Participants did one exercise to explore new roles, actions, or healthy assumption and choose one action to commit to. First, each participant sat on three different physical chairs and tried to take the role of the chair owner and explore. The participants rotated on the three times more than once, moving back and forth between the self chair and the group and coach chairs. The exercise was considered challenging for the participants. It was not easy to imagine what the other’s perspective might be at first, like imagine what others think of him/her or what they think of his/hers experience. The coach was aware that it is difficult and that the participants might be afraid to explore on their own, that why the coach kept probing and encouraging. Many instance of “I don’t know” were said during the exercise. Eventually after many probing instances from the coach all the three participants were able to explore some actions and make a plan for the execution of one action. Though it was a challenging exercise but it included many laughing moments due to the role playing nature of the exercise. After that they were asked to write down the actions and reflect on the exercise.

Coach: ok so would you please move to this chair...now you are a third person watching ...so what do you think of what both “name” and the group said about him?
Case 4: yeah ...what should I say actually.... laughing...I think for both they should confidently be looking around and see positive and possibilities
Coach: what do you mean for both?
Case 4: for both groups...it’s not as bleak as it looks like... come out of the tunnel...I mean it’s nothing to be afraid of...
Coach: are u a third person or “name”?
Case 4: probably the coach
Coach: are you the coach or “name”?
Case 4: no I think I will be the coach
Coach: what are you really...now are u really the coach or still “name”?
Case 4: I would say get off your seat and just come out of it ...yeah...what keeps you..
Coach: so what do u think is stopping “name” from doing that?
Case 4: what’s stopping him. I think he’s a little bit just forgetting...or letting things be that’s probably...his problem
Coach: could you elaborate more on this?
Case 4: you want me to talk as myself or?
Coach: nonoo
Case 1: you r on that chair
All laughing
Case 4; yes ...some bad experience ...but you are in different environment u don’t have to worry about the past that much anymore...you got out of it...so
Coach: so we go back as “name”
Case 4: yeah
Coach: so “name” what do you think of what they said about you now?
Case 4: yeah...I happen to agree with these people and ....but there is probably not much ...more like to man off, get up and get going there is no real predicament at the moment that would keep me back.

Another example
“Coach: u r the coach.
Case1: I think is ...she should try and celebrate the moments that are good that are positive
Coach: ok would u go back to “name”...So “name” what do you think of what they said?
Case 1: yeah...it’s nice to hear
Coach: do you agree to what they said?
Case 1: yeah ...Laughing
Coach: is there something else that u know about yourself that they didn’t know? they didn’t say it ?
Case 1: no there is not, but still it’s hard from me to take their advice I feel again kind of tired or blocked ...etc that’s.....
Coach: and it’s ok
Case1: yeah
Coach: so will you take the advice of the coach ?
Case 1: yeah I think I should try
Coach: when do you think you should try?
Case 1: the best thing will be asap...the deadline should be 3 months from now but the sooner the better.
Coach: 3 months from now to go out and celebrate?
all laughing..
Coach: are you serious
Case 1: laughs again
Coach: do you think it’s a realistic time frame? smiling
Case 1: laughs... ok...one months from now
Coach: come on
Case 1: yea I have...
Coach: what is it that you fear?
Case 1: I have e to make an appointment with someone and ...

Table 23.a
Non-critical reflection coded instances

<table>
<thead>
<tr>
<th>Non critical reflection: Projecting; current reaction/giving opinion or view about something</th>
<th>Non critical reflection: Story telling of past experience/dilemma</th>
<th>Self reflection on own lifestyle or habits or thoughts</th>
<th>Reflective action</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>0</td>
<td>15</td>
<td>0</td>
<td>32</td>
</tr>
</tbody>
</table>
In this phase five of the six categories of transformation were excluding the sharing of the assumption category (see Table 23.a, b, c, d, e). As mentioned the coach had to contribute with a lot of probing, some encouragement and own perspective (see Table 23.f). Few chores, comments and some laughs were also present as mentioned before (see Table 23.g).
Table 23.g

*Game interactions coded instances*

<table>
<thead>
<tr>
<th>Chores</th>
<th>Commenting on gameplay</th>
<th>Jokes and laughs</th>
<th>Strategy</th>
<th>Out of game</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>7</td>
<td>16</td>
<td>4</td>
<td>1</td>
<td>36</td>
</tr>
</tbody>
</table>

**Phase eight - The Gift -**

This is the last phase of the game. The audio data to this phase was mistakenly lost, and the researcher transcribed it from own memory and the notes taken during the workshop. The participants explored positive assumptions from others in this phase. The coach, researcher and participant all have thrown some positive gifts to the participants sitting in front of them. One participant indicated that it was not very comfortable, another said that it felt strange and unexpected, while the third indicated that it is strange but nice experience. Examples of the positive things mentioned in this exercise are: you are strong, capable, you care about others, you are funny, you are a good father, you are courageous, you have a tender heart, you can achieve more things, you make a good company.

Table 24.a

*Non-critical reflection coded instances*

<table>
<thead>
<tr>
<th>Non critical reflection: Projecting; current reaction/giving opinion or view about something</th>
<th>Non critical reflection: Story telling of past experience/dilemma</th>
<th>Self reflection on own lifestyle or habits or thoughts</th>
<th>Reflective action</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 24.b

*Feeling examination coded instances*

<table>
<thead>
<tr>
<th>Examining current feelings</th>
<th>Examining negative feelings associated with experience</th>
<th>Examining positive feelings associated with experience</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 24.c

*Exploring coded instances*

<table>
<thead>
<tr>
<th>alternative empowering/healthy feelings (individually)</th>
<th>new actions/roles/healthy assumptions (individually)</th>
<th>new actions/roles from other participants</th>
<th>Other's positive assumptions</th>
<th>Perspective taking: Coach or researcher’s opinion/perspective</th>
<th>TOTALS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
Only exploring others positive assumptions instance were present during the exercise since the sitting participants didn’t reply back. A couple of feeling examination and non critical self reflection moments happened during the reflection after the exercise as well as during the other action stops exercise that took place in this phase (see Tables 24.a, b, c). The coaching input was minimal in this very short phase (see Table 24.d). Few game interactions were found during the action stops exercises (see Table 24.e)

Table 24.d

<table>
<thead>
<tr>
<th>Coaching roles coded instances</th>
<th>TOTALS</th>
<th>Probing from other participant</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coach probing</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Coach questioning assumptions</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Coach seeking clarification/ encouraging sharing reflections/ acknowledging</td>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Coach/ Researcher explaining exercise</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Perspective taking: Coach or researcher’s opinion/ perspective</td>
<td>0</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Table 24.e

<table>
<thead>
<tr>
<th>Game interactions coded instances</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chores</td>
<td>11</td>
</tr>
<tr>
<td>Commenting on gameplay</td>
<td>5</td>
</tr>
<tr>
<td>Jokes and laughs</td>
<td>7</td>
</tr>
<tr>
<td>Strategy</td>
<td>6</td>
</tr>
<tr>
<td>Out of game</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

After Game reflection

After the finishing the game, the participants were asked to reflect on how they feel after this experience, then they were asked to see if there are changes in their before after the game discussion questions, and to compare if there were any (See Appendix D). They did notice quite some changes. For Case 1, after comparing realised that before version was more about what the job required

“This (the last) one is a bit diff...here yesterday there was be clear to my boss what I’m working on and stick to that...now it is talk to my boss loud and what it is that I need...that’s different. Get 100% instead of 50% job yesterday...now take some days off do nice things with friends and work exactly 8 hours not anymore...more about me not about the job yeaah.”

Case 2: said I used to be ok not to be passionate about my job, but now I think it is important and should consider finding passion in what she does or may be do something else. Case 4, indicated that now the focus is on the new job and not the old job associating with negative experience of burnout. The participant realised that the answers of the questions about the job challenges and what one values and devalue about the job, were about the current job only and about the things values about it in the after version while in the before it was about both previous job, the one that caused the burnout and current job
In this last part of the workshop, some non critical self reflection moments, examination of feelings, and planning actions were found. While there was no critical examination of assumptions, nor sharing and exploring instances. (see Tables 25.a, b, c). The coaching input was mostly acknowledgement of the participants big efforts during the game, and their willingness to share and explore more. (see Table 25.d). Final laughs and comments on the game were shared as well as out of game discussion. (see Table 25.e)
Table 25.e

*Game Interactions coded instances*

<table>
<thead>
<tr>
<th>Chores</th>
<th>Commenting on gameplay</th>
<th>Jokes and laughs</th>
<th>Strategy</th>
<th>Out of game</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>
5. Discussion and conclusion

Discussion of the results

The current study aimed at inducing transformative learning in GBL environment using reflection triggers and a facilitator to engage participants in self critical reflection and discourse while considering the burnout context of the learners. The main two research questions guiding this study were: “To what extent does inducing the first six steps of transformative learning using the designed board game and facilitated by a coach result in perspective transformation of the burnout employees?” and “To what extent do the reflective processes resulting from inducing transformation follow the reflective processes dictated by the first six steps of transformative learning?” The following section will discuss the results and provide answer to this questions.

Participants experience of transformative learning

Regarding the first research question, overall the results shows that participants experienced all the six phases of the transformational process as described by Mezirow’s model (1978). The participants had already experienced a disorienting dilemma, the burnout experience, and then during the workshop participants engaged in discourse with coach as well as other participants, and also engaged the critical self reflection (Mezirow, 2003). They examined the feelings associated with their experience, critically examined assumptions on multiple levels, assumptions about others, their work, the world, assumptions about their own lifestyles, attitudes, and behaviours, and examined very deep assumptions about their own self. They also examined how these assumptions impact each other. Though these different levels of assumptions are explained in Mezirow’s transformative learning model (1978, 2000, 2003, Taylor, 2007), the way they impact and relate to one another has not been explained or described before like it was described in this study. This is of course as far as this study is aware of.

The participants further examined the all the possible sources of these assumptions and the related circumstances resulting in forming the assumptions. This is also what Mezirow referred to as the ‘subjective reframing’ or premises reflection (1998). Reaching this significant level of critically examining the sources of the assumption can be considered an achievement for this study. Researchers like Taylor (2007) and Kreber (2004) argue that studies and practices often stop at reflecting “‘within’ a taken-for-granted set of assumptions (context reflection), instead of testing validity of those assumptions ...and critically interrogating them as in premise reflection” (Taylor, 2007, p186). The participants further, shared this assumptions and examined the fear keeping them from taking actions to change their situation to the better. Then they were
able to explore new healthy role, actions individually through the help of the facilitator and by taking perspectives and advices from each other which Mezirow (2003) considered a critical aspect to the transformational process. Participants also listening to others positive thoughts as part of their process of exploring new roles. They were finally able to choose actions to commit to after the workshop and planned how to put this action into motion afterwards. These actions come from a very different perspective about themselves and about their experience than the perspective they had before the workshop. Therefore, the participants passed through the six steps Mezirow defined and explained in his Model (1978, 1998, 2000, 2003).

It can be concluded also from the results that the participants showed a more developed reflective behaviour by each phase of the game. That was even more clear when the participants were able to notice the different patterns in the before and after the game discussions or reflections. They were able see how they used to look at their experience and how they look at it after the workshop, their new perspective about themselves and what they can do and able to do now is considered to be more empowering and liberating.

Having passed through these process and steps of transformation, it can be concluded that the participants experienced the beginning and seeds of transformation since they still need to put their plans into action and integrated and further practice the new perspective till it becomes part of their life. It can be therefore concluded that indeed the implementation of the first six steps of Mezirow’s model for transformation in the GBL environment successfully induced the transformational process, perspective transformation and developed a more reflective awareness of the participants.

An important point to note here after the previous conclusion, is that despite that the three participants have undergone a perspective transformation, the process and the transformation of each one of them remain different. This can be contributed not only to the unique experience of each of the participants, but also to their cognitive capacity and level of cognitive development when engaging in the critical reflection as argued by Merriam (2004) and Kreber (2004).

Regarding the second research question, the study had six hypotheses regarding the implementation of six steps of transformational learning as well as the GBL environment as a context for transformation. First the hypothesis of the implementation of the six steps will be discussed.

The first step is the disorienting dilemma, and it represents the experience that already took place in the participants’ past. This step was implemented in phase one of the game, as hypothesized the first phase it included storytelling, and non critical self-reflection and also coach in this phase encouraged participants to start sharing. The results also show that the coach
started to enable reflection by probing in some moments, which can indicate that the coaching role is not only dependent on the current phase or step but also dependent on the reflection input from the participants as well as the their instant state.

The second step is the examination of the feelings, and it was implemented in the second phase of the game. As hypothesized this phase included examination of the experienced feelings during the disorienting dilemma and the coach encouraged and enable self reflection as expected. There were also many moments of storytelling and non critical self reflection which is can happen in any phase, but unexpectedly few moments of exploring new roles were found in this phase as well. This can contribute to the argument that the transformational steps can be interchangeable, and that the processes of critical reflection and exploring can take turns and learners can move back and forth between the different processes (Mezirow, 2000; Taylor, 2008). Further the coach also started to challenge and question few assumptions which has the same indication as in the first phase and also is line with what Daloz (2012) argued for and what Wood (2007) found when studying the transformational experience after an appreciative enquiry event, that the roles of the coach are interchangeable as well and can not be fixed to certain roles in a specific step.

Related to the second phase of the game that the results from the MBI_GS were considered in line with the symptoms indicated by the participants through the workshop many. The three Participants who showed high levels of burnout also expressed a lot of burnout symptoms, both physical and emotional in their storytelling moments. For instance, physical symptoms like suffering from lack of sleep or sleep disturbance, persistent headaches, laziness or lack of physical energy. Further, the participants choices of feelings and their intensity basically reflects their scores on MBI-GS.

The third step is the critical examination of assumptions and in the implementation it was divided into two phases of the game. Phase three in game, as hypothesized included critical reflection; examining what are the different assumptions, about the self, others, work and the The coach as expected also encouraged, enabled reflection and challenged assumptions. But further all the other processes were found except for planning for actions. Which indicates the same as mentioned before, the interchangeability nature of the steps and also the recurrence of the transformational process (Taylor, 2008; Wood, 2007). Then phase four of the game, as hypothesized included examining and questioning the sources and the circumstances that resulted in forming the assumptions. And as in phase three, phase four included all process except for the planning for action. In this phase the assumptions about work is in most of cases related to assumption about oneself. One can see instances of critical examination of assumptions about the self were present during examination of assumptions about work. Participants move back and forth between them. One could say the way we view our own selves impact the way we
experience work. While on the other hand one could say that our experiences in work impact the way we view ourselves.

The fourth step is the sharing of the transformation which was implemented in the fifth phase of the game. It was hypothesized to include conscious sharing of the discovered assumptions which actually took place in the previous two phases of the game. But as hypothesized for this step, the participants shared that they are conscious and aware that they have unhealthy limiting assumptions and that they just fear the change. The coach as expected reassured participants and encourage the sharing of the process.

The fifth step is the exploring of new role and it was implemented in phase six and eight of the game. As hypothesized they included exploring healthy roles and assumptions as well as new actions individually and exploring roles, assumptions and action from the learning group and coach. It further included few critical examinations of feelings and assumptions, again pointing to the recurrence and continuity of the transformational process. In phase eight some participants expressed that it was not comfortable to hear positive thoughts of others, it seems that the reason might be that participants are not used to hearing positive comments, or that they are more used to the unhealthy voices in their own head. Another reason could also be that people whether in work or personal life do not explicitly or frequently express and communicate positive thoughts about others. Regarding the coaching roles in these two phases, they were as hypothesized, the coach encouraged, enabled reflections, and challenge the participant to explore. The coach further offered some perspectives on how to explore the new roles and this role also can be related to the role of providing vision for transformation found by Daloz (2012) and Wood (2007).

Finally, the sixth step which is the planning of course of action and was designed as the seventh phase of the game, and was implemented with the sixth phase. As hypothesized it included choosing actions from the explored and planning how and when to execute them in the future. Nevertheless, planning to commit to actions was strongly encouraged by the coach, who kept encouraging the participants to commit to doing the actions after the workshop. Also when looking during the game only one instances of reflective actions were, actions that are explored and planned after a reflective moment, and suggested by the participants own their own without the coach's encouragement to plan for actions. This is may be contributed to the nature or the effects of the burnout experience which leaves the individual unwilling to plan and commit to new things due to the feelings of exhaustion and low efficacy, which further results in being afraid to plan and commit to the unknown.
Evaluation of the learning environment

Group learning setting

In was noticed that being in a group and listening other participants sharing their thoughts and reflections encouraged some participants to share and reflect as well. In many moments during the workshop, that when one participant initiates sharing, and critically reflect on very deep assumptions, others were encouraged to share and reflect, (example examining unhealthy assumption about the self). Also, in other moments, when one of the participants passed the sharing turn and others shared, usually the one who passed the turn eventually shares and reflects. The reflection of some participants helped others to know how and on what to reflect. Another relevant point is the found instances of participants probing or seeking clarification during others reflections, in which this probing moments guided the discourse and helped the participant reflecting to examine and explore more. Therefore, it can be concluded that the game as a tool and also with the roles of the coach facilitated and enabled group learning and resulted in a very rich social experience of the participant.

Safety of the learning environment

Some Participants felt comfortable to openly share and reflect on negative feelings, very personal stories, very deep negative or unhealthy assumptions about the self. They also comment on each others acknowledge each other’s reflections. Further, critical discourse between participants took place. The instances of participants probing or seeking clarification during participant’s reflections were another indicator, and participants engaged and responded with reflections the same way he/she did with the coach. The participants even felt safe to share also when occupational physicist joined and watched the process. He indicated that he doesn’t want the participant to be embarrassed to share while he is present. So one of the participants replied: we are doing a game and laughed indicating that it’s ok, we are just playing and enjoying no embarrassment.

Occupational physicist: “I hope I don’t embarrass you too much because u know u r busy and working on this”

Participant: “we are doing a game”...~ laughing~

Further, at several moments in the workshop the three participants explicitly mentioned that they feel more relaxed, calm and less exhausted than before starting the workshop. One of the participants also mentioned that the environment feels safe and that this helped to explore more and talk more openly.

The atmosphere in general was very relaxed and joyful as indicated by the participants in their feedback. This can also be noticed in the laughing and joking moments that were shared
during the gameplay, either as result of some chores, discussions or funny reflections. Many chore were found thorough the different phases of the game. Chores like throwing dice, moving avatars, dealing, picking, reading and arranging cards, writing journals. Chores were mostly followed by participants comments and joke. The different variety of chores and actions chosen in the game avoided participants boredom and helped in engaging them. It can be therefore concluded that GBL context with the facilitation if the coach provided a safe, friendly, relaxed, joyful and engaging environment.

**Game Evaluation**

**Strengths and weaknesses**

As concluded before the game provided a very joyful atmosphere and lessened the intensity of reflecting about work and life problems. Participants were very engaged throughout the workshop and never showed boredom moments.

Also, the execution of the game was very smooth, all design atoms; storyline, goal, chores, avatar and game bits, mechanics and dynamics can be considered well designed, since nearly no flaws emerged during the implementation. Moreover, the exercises both related to the transformational phases and the action were very practical and interactive.

An important point to consider is that the game can not be considered as a standalone reflection tool that can be used by the players on their own. The coach played an essential role in implementing and facilitating the process of critical reflection and perspective transformation as concluded. Therefore the game can be considered a good and innovative tool for practitioners who are understand transformational learning and trained for using the game.

Further coaching 4 participants in such a little time frame was considered a non easy job; mentally and physically as well. At a point the coach felt tired and asked the researcher to take the coach role till resting and resuming. This can be accommodated by stretching the workshop time for three or four days.

Moreover, the English Language was considered at some moments as a barrier to reflection. The difficulty of expressing some words in English was noticed. Some participants even used dutch words in their conversations.

**Participants evaluation and feedback on workshop**

The three participants who completed the workshop were very positive in their evaluation of the workshop and mentioned that they found it beneficial to them. Two participants gave it an overall score of 5 out of 5, while the other participant gave it 4 out of 5. In their written feedback (See Appendix D) they mentioned that they liked the game and its exercises, sharing and
hearing from others, exploring the positive experiences or memories and recalling the associated positive feelings.

“Exercises are very effective. Board game is useful, surprising exercises, high importance to create awareness”

“Very playful, and diversity of activities, very personal approach”

They also described the game as nice and fun, useful tool to provide structure for discussion, and a

“Wonderful tool, you can comfortably address issues”

Two points of improvements were suggested; first is increasing the time of the workshop since the second day’s pace was fast, and second is considering the work environment factors along side with the adopted personal or individual approach.

**Expert impression and feedback**

As mentioned in the procedure section, two specialists or practitioners visited the workshop to monitor the process, provide help and give feedback. The first is one of the University of Twente occupational physicist. He provided some positive feedback and indicated his interest in the tool and the deep approach, and further gave some comments to consider.

“because I’m working here as occupational physician ..this is all new for me and it looks fantastic and u know I don’t have really like a program so I just want to listen to what u r saying how this game is working…I hear a lot of familiar things actually I think everyone should u know should do this game…I think a lot of things can be very valuable for everybody”

“perhaps every now and then I might say something if I recognize something from my practice because u know i work with people for example who get burnout…and try to help them and guide them to get better…but u know I never go through these detail …so even for me this is very u know interesting and something to learn from”

Also, he indicated that the game is a good tool for practitioners to use, it is nice to consider playing a game in group context instead or beside one one sessions. He also commented on the different levels of readiness of participant to reflect and help the coach to dig deeper, and mentioned that this also happens with him that some clients are just not ready to face their assumptions yet. When he was asked to advise on this issue he said that unless the participant are willing and ready to help and explore, there is nothing that we can do about it.

**Suggested Changes**

In regards to the content changes, first the story of the game is currently about a girl, a gender specific indication can be avoided so that participants from both genders can relate more
to it. In phase one the participants mistakened the indifferent picture to a working picture, because it helped in reflecting about the participants’ work, another picture can be added to indicate the indifferent person. The mirror exercise should also be included in the actions cards, when participants flip the pictures cards they should find behind it for example this statement: “now take a deeper look into yourself, and listen to the mirror”

In phase three, the used phrase ‘Success is...’ could be rephrased to indicate assumptions that avoid social desirability. Also the ten choices of the same exercise can be negatively formulated to make it easier for participants to relate to. In the same exercise personal life factors like family (a spouse, a parent) can be included in more explicit choices (cards) since it was found that personal factors and context contribute to the perceived assumptions. Further the ordering/priority exercise implemented in phase three: (what bothers you most about work and personal life) should be integrated to the game exercises and then participants try to find the link and reflect, if the link was not already found during the exercise. This extra exercise is considered relevant to the critical reflection since the Mezirow explained that the transformational process is related to the examination of one’s own true priorities and redefining them (1978). Further, clearer description of actions done in each phase are needed (see Appendix E). For example in phase one: arrange the pictures according to your own story.

Regarding implementation changes, reflection is not an easy process, it requires mental, and emotional effort as concluded before. The content of the workshop can be spread over more days to increase workshop time and provide opportunity for participants have more moments with themselves during the workshop and also opportunity to reflect on their own in between the sessions. This will also results in the coach being less tired during the workshop. Another point is bringing the goal of some exercises to the participants awareness as concluded before for phase three.

Regarding design changes, a starting point should be added outside the outer path. The transformational path could be more sophisticated and change it’s direction after phase five to reflect the participants’ new perspective.

**Theoretical and practical implication**

With regards to theoretical and research implications, the current study tried to implement transformational learning from a very deep personal approach. The study provided understanding to the perspective transformation process while it is taking place. It also gave insights to the different assumptions one could have and how they affect each other and affect the meaning making of experiences. It is believed that this detailed insights can influence the transformational learning model by adding more explicit steps that address the different levels of
assumptions and their examination. Further the study customized the transformational model learning for the burnout context, therefore burnout prevention and coping studies can benefit from this model. Insights of design and development of a tool that implements adults learning model, such as the transformational model can further inspire the research of transformative learning to explore new non traditional contexts, as well as inspire the research of innovative learning and educational tools.

For practitioners as well as organizations: it is worth considering implementing similar workshops and exploring more innovative tools and setups for promoting employees reflective skills and transformative learning. Such tools can engage all employees not just the burnout ones in meaningful learning which can help employees keep up with dynamicity of the workplace. As for the burnout employees, practitioners can benefit from the designed tool in the reintegration periods of the employees beside the traditional therapist/physicist individual meetings. Also, the study adopted individual focused approach. It is worth mentioning that these kind of interventions are not enough, they require an organizational infrastructure that supports it and an environment that encourage critical reflection, given that organizational factors directly affect the development of burnout. Further, organizations should consider providing opportunity for employees to talk about their experiences or life events and be listened to, by either specialists or support groups/communities with no intended aim except for the sharing. Confidentiality issues should be taken into account in this regards. Moreover, the study provided insights into the design and development process of an innovative tool that induce meaningful and deep learning. This idea and process of implementing learning theories into practical physical games can also benefit educational tools developers.

**Methodological limitation and future Research**

The current study has some limitations that need to be addressed in order to guide future research. The coding scheme is developed in way that captures the details of the transformation process and show the discrepancies between the different cases in how and to what extent they reflect deeply. This resulted in a long and complicated coding scheme that requires not only understanding of the transformational learning theory but also understanding of the context of its implementation in this study.

Closely related to the coding scheme is the coding process that can not be considered very accurate and the interrater reliability was not considered strong. In some instances it might be subjective to the coder, since many coding instances not only depended on the coded unit but also on the context in which this unit is mentioned. Further some instances are coded for example as story telling without reflection, while it might be the case the speaker is actually reflecting within the story but this assessment or reflection is not explicit in the speech.
Moreover, at some moments the professionally of the English language can also be considered a barrier for reflection which might result in the same problem that the spoken speech is not very indicative to what really the participant is trying to communicate.

Another limitation is the conflict that arises on the one hand from the pragmatic nature of the research that essentially aims at helping the participant and on the other hand the basic research concept of providing participants with the same intervention. This can appear when trying for example to evaluate and compare the quality or the deepness of the discourses of the participants. The discourse is guided to high extent by the coach’s input and probing. Though the game provided structure with specific exercise, the flexible approach of coaching that tries to make use of a presented opportunity for probing, as well as gives input that is thought as suitable and beneficial for the current flow of conversation result in different guidance among the cases and therefore different responses and reflections. Therefore for future research, in order to have more comparable results and more effective evaluation of the process, the coach’s input should be taken into consideration. Also it’s advised that the coaching input remains flexible, while using a questions checklist to make sure that all participants were presented with the same or at least minimum set of guiding inputs for reflection and transformation. This could partly address this conflict and therefore further investigation of ways to resolve this conflict is recommended.

Further, this study was explorative in nature and provided insights for adopting non traditional context for transformation. Follow up sessions with the participants are advised to make sure that the transformation is sustained and integrated in their lives. Non traditional contexts should be explored for these follow up sessions as well. Further, future research is still required to evaluate the transformative learning in the non traditional context of GBL compared with the previously researched traditional context.

The workshop implementation time is also considered as limitation for the transformation process and therefore a limitation for evaluating the tool. On the one hand transformation takes time to take place and the more days participants have the opportunity to reflect after the session the better output. So it is better to spread the workshop over more days and then monitor and follow up with participants regularly. On the other hand, the participants may be working employees and being absent for 4 or 5 days is not very convenient. For future research, this tradeoff should be further examined, and its advised that the workshop time planning is coordinated with the organization’s human resources specialists, so that the workshop attendance is encouraged and supported.
Final Conclusion

This study aimed at inducing transformative learning and guiding the process of critical reflection by first designing an innovative tool that maps transformational learning phases. Regarding this aim an innovative board game is designed, developed and further implemented in a workshop for burnout employees to help them make meaning of their burnout experience. The study showed some design guidelines and details. Then study explored the transformational process while it is taking place and examined whether transformative learning was induced in a GBL. This was achieved through an explorative case study that indicated that the participants experienced a perspective transformation during the workshop and further showed developed reflective behaviours. Also guidelines for improvement in the following design iterations were provided. Finally, the study explored theoretical and practical implications, and also discussed some limitations and recommendation for future research.
References


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Shute, V. J., Rieber, L., & Van Eck, R. (2011). Games... and... learning.*Trends and issues in instructional design and technology,* 3.


Ziegahn, L. (2001). Talk about culture online: The potential for transformation. *Distance Education, 22*(1), 144-150.
## Appendix A

### Table 26

**Coding Scheme**

<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Operationalization</th>
<th>Examples (If needed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non critical reflection</td>
<td>Projecting experience</td>
<td>Giving opinion or immediate reaction based on own experience without assessment or what Zeichner and Liston “rapid reflection” (1996)</td>
<td>Projecting on pictures: “This is a happy, disco dancing”</td>
</tr>
<tr>
<td></td>
<td>Story telling of experience/dilemma</td>
<td>Narrating previous experience or explaining current situation without assessment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self reflection on own lifestyle or habits or thoughts</td>
<td>General assessment of experience, current situation, lifestyle, habits thoughts without critical examination of a certain assumption. Or what Mezirow called “intentional assessment” (1995) or Straightforward reflection (Kitchenham, 2008)</td>
<td>Thinking of should or shouldn’t have been done, assessing of quality like if it is good, bad or what could be changed: “Going out I should do more”</td>
</tr>
<tr>
<td></td>
<td>Reflective action</td>
<td>Planning of action after a moment of reflection (Wood, 2007), without encouragement from others.</td>
<td>Planning going camping after the mirror exercise</td>
</tr>
<tr>
<td>Feelings examination (Mezirow, 1978)</td>
<td>current feelings</td>
<td>Assessment of the current emotional state</td>
<td>I feel more relaxed, I feel at ease, I feel comfortable, less exhausted</td>
</tr>
<tr>
<td></td>
<td>negative feelings associated with experience</td>
<td>Assessment and examination of negative and unpleasant emotions or feelings encountered during an experience or dilemma</td>
<td>It makes me feel threatened, scared</td>
</tr>
<tr>
<td></td>
<td>positive feelings associated with experience</td>
<td>Assessment and examination of positive and pleasant emotions or feelings encountered during an experience</td>
<td>It felt good, nice</td>
</tr>
<tr>
<td>Critical Examination of assumptions (Mezirow, 1978)</td>
<td>Assumption about others/ the world/ work</td>
<td>Examining or stating a perception related to other people, work or the world in general</td>
<td>It’s impossible to decide for myself how the work is done.</td>
</tr>
<tr>
<td></td>
<td>Assumption about own deeds/actions/habits/behaviours</td>
<td>Examining or stating a perception related to one’s own deeds, actions, behaviors, habits, wants or desires.</td>
<td>I have to finish things that I started.</td>
</tr>
<tr>
<td></td>
<td>Unconscious voice of unhealthy assumption about own self</td>
<td>Examining or stating a perception related to one’s own self</td>
<td>When I am not feeling loved I feel that I am not important</td>
</tr>
<tr>
<td></td>
<td>linking sources to feelings/</td>
<td>Exploring and Finding the source or</td>
<td>My parents let us do anything we wanted,</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------------------------------</td>
<td>------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td></td>
<td>triggers of pleasant or unpleasant experiences. Could be people, events, or things. Also being aware of the effect of the source or trigger of the pleasant or unpleasant experience. As Mezirow’s “subjective reframing” (1998)</td>
<td>Being aware of the effect of the source or trigger on the existence of the unhealthy assumption about one’s own self</td>
<td>Thinking of pleasant and positive feelings that one wants or wishes to have instead of unpleasant feelings</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Thinking of new options either actions, roles, relationships with others, lifestyle, or habit to make a positive change. This could be based on one’s new healthy perspective or trying to imagining others’ perspectives</td>
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</table>

- **Experiences/ Assumptions**: Triggers of pleasant or unpleasant experiences. Could be people, events, or things. Also being aware of the effect of the source or trigger of the pleasant or unpleasant experience.
- **Linking Sources to Unhealthy Assumptions About Self**: Being aware of the effect of the source or trigger on the existence of the unhealthy assumption about one’s own self.
- **Sharing the Transformation (Mezirow, 1978)**: Sharing unhealthy assumptions about self and accepting it by consciously sharing it with others as an untrue assumption.
- **Exploring (Mezirow, 1978)**: Exploring: alternative empowering/ healthy feelings (individually) and thinking of pleasant and positive feelings that one wants or wishes to have instead of unpleasant feelings.
- **Planning (Mezirow, 1978)**: Exploring: new actions/ roles/ healthy assumptions (individually) and thinking of new options either actions, roles, relationships, lifestyle, or habit to make a positive change.
- **Coaching (Emergent Codes)**: Exploring: new actions/roles from other participants and taking and thinking of others’ advice, suggestions of actions, roles, relationships, lifestyle, or habit to make a positive change.
- **Planning/ Committing to a New Perspective Actions**: Exploring: Other's positive assumptions and accepting other’s positive thoughts about own self or behavior.
- **Explaining Exercise**: How does this make you feel, why, what else can you do.
INDUCING TRANSFORMATION USING GBL

<table>
<thead>
<tr>
<th>Perspective taking: Coach’s or researcher’s perspective</th>
<th>Asking for the coach’s different perspective or listening to the coach offering another perspective to what the participant have.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant as a coach</td>
<td>Probing from other participant</td>
</tr>
<tr>
<td>Chores</td>
<td>Physical tasks required to progress in game</td>
</tr>
<tr>
<td>Commenting on a game play or move</td>
<td>Commenting after a task or players move</td>
</tr>
<tr>
<td>Jokes and laughs</td>
<td>Laughing, joking on the game artcraft, exercises, funny reflections or game move.</td>
</tr>
<tr>
<td>Strategy</td>
<td>Discussion of group next move or clarification of game procedure</td>
</tr>
<tr>
<td>Out of game</td>
<td>Irrelevant discussion to the game exercises or the reflections</td>
</tr>
</tbody>
</table>
Appendix B

Workshop invitation

UNIVERSITY OF TWENTE.

The Burnout Relief Workshop

Overworked, stressed out, emotionally drained and don't have enough energy to just face another day at work?
Don't feel like socializing with your colleagues as you used to?
Detached and lost your passion for work?
Used to be an achiever, but not anymore?
Miss the feeling of accomplishment and productivity?
Looking back for your old self?

If this is the case it is our pleasure to invite you to this burnout relief workshop, in which you will explore where did your emotional exhaustion come from and make meaning of such a draining experience. In this workshop, we offer you the opportunity to overcome the negative thoughts and form an empowering perspective. You will understand about further yourself, and find what is your work burnout level through scientifically proven tools.

With the help of a work-life coach, a researcher in human resource development and occupational health specialists, and by the end of workshop you will be more comfortable with yourself and in peace with where you come from. You will also have a support system that you can reach for in times of need. Moreover, you can contact our specialists whenever you feel you need to.

The workshop team extremely respects your privacy and consider it a priority, and therefore any personal information is highly confidential. We believe that we can provide you with our help while keeping your personal and work-life safe. For any questions or concerns about further privacy issues please contact us.

Important Notes:
- The workshop will be conducted in English.
- For a more efficient conduct of the workshop, places are limited.
- Data collected will be used anonymously in a master thesis. For more information, please contact us.

Planned dates:
- Warming up lunch: 03/06/2016 12:30 - 13:45
day one: 08/06/2016, 08:45 - 17:30
day two: 09/06/2016, 08:45 - 12:30
Place: University of Twente, exact location will be sent to the participants after registration for privacy.
Cost: Nothing, it's free!
registration: please click this link

*Workshop details (time-plan and moderator credential) will be sent to the participants.
*Lunches are provided for warming up and day one, coffee breaks are provided throughout the workshop.
*For further questions please email us at: burnoutworkshop.utwente@gmail.com
Appendix C

Discussion questions for before and after playing the game
What do you value most about your job and what do you de-value?
List down at least three reasons that make your job challenging
If you could write a different story about your life at work, what would it be?
What could you change about your situation that makes you happier?

Reflection journal questions

Phase I
What impact did this have on you?
What have you learned about yourself?
What is it that you would like to spend more time reflecting on?

Phase II
What impact did this have on you?
What have you learned about yourself?
What is it that you would like to spend more time reflecting on?

Phase III
What impact did this have on you?
What have you learned about yourself?
What is it that you would like to spend more time reflecting on?

Phase IV
Your timeline here
What impact did this have on you?
What have you learned about yourself?
What is it that you would like to spend more time reflecting on?
Phase V
To what extent, you feel that you have enough control over the direction your life is taking you?

Am I taking myself for granted?

To what extent do you feel that you have influence over the things that happened to you?

Phase VI
What have you learned about yourself?
What do you think you want to do now?

Phase VII
What have you learned about yourself?
What is it that you would like to spend more time reflecting on?

Questions to reflect on every now and then after the workshop
Am I living true to myself?
Am I waking up in the morning ready to take on the day?
Am I thinking negative thoughts?
Am I putting enough effort into my relationships?
Am I letting matters that are out of my control stress me out?
Appendix D

Participants feedback

Case 1

Workshop Feedback

What did you like about the workshop?
- exercises & game
- sharing stuff with others
- hearing stuff from others
- nice
- explore nice experiences was good
to gives you back the good memories
- good feelings

What are the points of improvements?
- maybe better in 2 days?
  (felt a bit hasty today)

Did you find the workshop beneficial to you?
- yes
- very much
- thank you!
What did you like about the workshop setting and what could be improved?

OK/fine

What do you think of the workshop duration (too short/Ok/too long)?

It was OK, may be extend with 1 or 2 hours

this morning felt a little hastily
no time to fill out the reflections
pity step 5,6

What do you think of using a board game as tool during the workshop?

nice!

fun
Did you find the coach helpful in your exploration process? how

*yes very much!*

*good questioning*

Did you find the researcher helpful to you all during the process? how

*very, thank you*

If you would give an overall rating of the workshop on a scale from 1 to 5 (1 being the least and 5 the most), what would it be?

*5*

Do you have any suggestions or further comments?
Case 2

Workshop Feedback

What did you like about the workshop?
- lovely ladies, very kind
- exercises are very effective
- board game is useful, surprising exercises, high importance to create awareness.

What are the points of improvements?

Did you find the workshop beneficial to you?

Yes
What did you like about the workshop setting and what could be improved?

Quiet building and quiet room in the building helps to focus, that was very nice.

What do you think of the workshop duration (too short/Ok/too long)?

Quite okay, but would enjoy to continue a bit longer.

What do you think of using a board game as tool during the workshop?

Wonderful tool, you can comfortably address issues.
Did you find the coach helpful in your exploration process? How

Yes, good observation and then asking the right questions to help you face the issue they already detected.

Did you find the researcher helpful to you all during the process? How

Yes, very clear explanation of everything. Very calm and comforting and friendly personality.

If you would give an overall rating of the workshop on a scale from 1 to 5 (1 being the least and 5 the most), what would it be?

5

Do you have any suggestions or further comments?
Case 4

Workshop Feedback

What did you like about the workshop?

Very playful, and diversity of activities.
very personal approach.

What are the points of improvements?

One point to share is the following.

There are usually a few contributing factor in a burnout. The self, other people, the system or environment, and coincidence or circumstance. This workshop focused on the self, which was fine for me.

Did you find the workshop beneficial to you?

Yes, it does help to verbalize ideas, rather than mulling them over and it also helps to address the big problem in pieces and chunks rather than one big ball of entangled threads.

others who still run in the race...
What did you like about the workshop setting and what could be improved?

The setting was fun.

What do you think of the workshop duration (too short/Ok/too long)?

The duration was OK.

What do you think of using a board game as tool during the workshop?

It is a useful tool to provide structure to the discussion.
Did you find the coach helpful in your exploration process? How

The were very perceptive.

Did you find the researcher helpful to you all during the process? How

Yes, by being supportive.

If you would give an overall rating of the workshop on scale from 1 to 5 (1 being the least and 5 the most), what would it be?

4

Do you have any suggestions or further comments?

Just to reiterate the earlier comment. This workshop focused on the self, which is often part of the problem. However, other factors such as other people, the work environment, or circumstance should also deserve attention.
Appendix E

Board Game text and graphical content description

**Printed area:** 100*70 cm
Game is for maximum 4 players

**Board Text and Colors**

Game Name: **Lost & Found**

**The 8 Phases (Inside Lines text) from outer to inner: without the numbers**
1. The Deja vu
2. The Baggage
3. The Mismatch
4. The Timeline
5. The Companionship
6. The Bird view
7. The Anchor
8. The Gift

**The Outer Steps text**

**Purple** Get Inspired
**Green** If I
**Baby blue** You
**Orange** Guess
**Yellow** Tips
**Fouchia** Alike
**Black:** New Message!

**Four Pictures:** in the four corners
concepts/ideas for the 4 pictures
1. Trees: Collection of trees or tree Patterns (for relaxation purpose)
2. puzzle (as if we are gathering the pieces of ourselves)
3. wooden path or bridge (for relaxation and as if we are walking a journey of reflection)
4. connected hands or people (for the feeling of we are together in the journey)
Picture in the middle: home icon (but more homy)

**Cards**

**The Story line card:** (1 Card)
Back in 1939, he left her the first message “Sweetheart, it’s the call of duty...I’m going to war. But I’m not leaving you behind, I will take good care of you. I have something for you, it is what you need, and you will find it in the right time. Just follow my messages.”

**How to play card:** (1 Card/not done!)
Black/blue/new colour (mission cards for the 8 phases): (8 cards)
1. Arrange the shadows, they will tell you what happened.
2. Reveal the cards that speak your heart.
3. If it is true, it means something to you...Pick what you think is true.
4. Go back to the origins, they hold the answers to your questions.
5. Find the hidden ties by arranging the cards.
6. The chair that will make you free might not be thee…Try them all.
7. Think it through...what exactly will you do?
8. You will be thrown at, don’t think it’s bad. Stand up and take it.

Phase 1 (3* 4 sets) (12 cards)
Happy silhouette
Indifferent silhouette
Sad silhouette

Phase 2 (16* 3 colours: red, orange, yellow * 4 sets) (192 cards) Each set consists of emotions each is repeated three times with the different colors:
1. Frustration 3
2. Anger 3
3. Anxiety 3
4. Sense of ineffectiveness
5. Overwhelmed
6. distant
7. taken for granted
8. Feeling of aggression
9. Feeling of intolerance
10. Feeling of injustice
11. Powerlessness
12. Indifferent
13. exhausted
14. Threatened
15. uncomfortable
16. Unappreciated

Phase 3 (10*1 set) (10 cards)
SUCCESS is...
Going the extra mile and working extra hours to meet tight deadlines
Being able to decide how to get my job done
Having pride in doing something of importance , doing it well and Enjoying it
Having a financially rewarding job
Being appreciated for what I do.
Integrating smoothly in the work community.
Goes hand in hand with a supportive work environment (supervisor/colleagues)
Goes hand in hand with a support system of family and friends.
Being in good terms with the right people in the organization
Finding a job that is aligned with my own values

Phase 4 (5 cards* 4 sets) without numbering
1. Recall the events that impacted you the most positively/negatively passing through your childhood,

   teenaging,
Present.
2. Recall the people that positively/negatively influenced your 
   childhood, 
   teenaging, 
   Present.
3. Recall the movies, songs and books that impacted you the most.
4. What are the events that trigger this assumption about yourself
5. Can you find a link between the assumption and the previous?

**Phase 5**
It is
our
Light,
not our
darkness
that
frighten
us
the most...

**Miscellaneous/Coloured cards (38 cards)**

**Purple Get Inspired**
- It isn’t the mountains ahead to climb that wear you out, it’s the pebble in your shoes
- “Life is hard” I’m always tempted to ask “Compared to what?”
- “If things go wrong, don’t go with them.”
- Our lives begin to end the day we become silent about things that matter
- Travel far enough to meet yourself
- Failure is a bruise, not a tattoo

**Green If I**
1. Had 10,000 euro to put in charity, I would put them in (wild animals rescue, building schools for african children, saving abandoned dogs, scientific research for new treatments, shelters for refugees)
2. Had a superpower what would it be.
3. were born in another country, which country would you prefer
4. Would go back in time where would u go and why
5. Would have three wild animals in your home, what would they be.
6. Would be something else what would I be

**Baby blue You**
1. Tell us something we don’t know about you
2. Two lies and a truth
3. Funny dream
4. tell us about someone who inspired you
5. Your favorite day
6. Show us a talent

**Orange Guess**
1. What comes down but never goes up?
   Rain
2. What kind of tree can you carry in your hand?
   A Palm
3. You heard me before, Yet you hear me again, Then I die, 'Till you call me again. What am I?
   Echo
4. A seven letter word containing thousands of letters
   Mailbox
5. A murderer is condemned to death. He has to choose between three rooms. The first is full of raging fires, the second is full of assassins with loaded guns, and the third is full of lions that haven't eaten in 3 years. Which room is safest for him?
   Third: Lions that haven’t eaten in 3 years are dead
6. You use a knife to slice my head and weep beside me when I am dead. What am I?
   Onion
7. I never ask questions but I'm nearly always answered. What am I?
   Doorbell
8. What is always coming but never arrives?
   Tomorrow

**Tips**
1. Cooking
2. Health
3. sightseeing
4. Home decoration
5. Gardening
6. Shoping

**Alike**
1. Tell us something that you and your friend like/love
2. Guess your friend’s favorite nickname.
3. Tell us Something that you and your friend hate
4. Guess your friend’s favourite color
5. Share a secret with your friend.
6. Tell us about a book that you and your friend read