

Theoretical Article

Transforming the EMPATHICS Model Into a Workable E4MC Model of Language Learner Well-Being

Fakieh Alrabai, *King Khalid University, Saudi Arabia*

 <https://orcid.org/0000-0002-5040-3022>

falrabai@kku.edu.sa

Jean-Marc Dewaele, *University of London, United Kingdom*

 <https://orcid.org/0000-0001-8480-0977>

j.dewaele@bbk.ac.uk

ABSTRACT

This paper presents a critical analysis of the EMPATHICS model of language learner well-being proposed by Oxford (2016) as a prerequisite first step to validate this model. The analysis was guided by the theories in the field of language learning and teaching as well as by some elaborations and suggestions originally made by Rebecca Oxford herself. The massive overlap between the dimensions in the EMPATHICS and the absence of operationalization in the literature indicate that the model is acronym-driven rather than theory-based. A thorough revision of the model is needed to eliminate overlap between the dimensions. We argue that empathy, emotions, emotional intelligence, engagement, motivation, and character strengths of language learners (E4MC) lie at the heart of the EMPATHICS model and that all the other dimensions are theoretically interrelated with these more limited number of dimensions. A revised, trimmed-down E4MC model of language learner well-being would allow the operationalization of the construct and could lead to the future development of an instrument that could be further validated.

Keywords: well-being, language learning, empathy, emotions, character strengths

INTRODUCTION

Positive psychology (PP) examines positive elements and strengths in humans without ignoring the negative. As Oxford (2016) pointed out, PP brings a positive perspective on the difficulties that humans face. Looking at well-being from a PP perspective means not just observing the lack of negative affect, depression, loneliness, insecurity, and illness but also the presence of positive affect, happiness, social connection, trust, and wellness (Butler & Kern, 2016). The authors postulated that well-being can be conceptualized objectively by providing sufficient resources that satisfy basic needs such as opportunities for education. They added that well-being could also be defined and measured subjectively to refer to some concepts such as happiness, thriving, and flourishing. Nevertheless, human well-being remains one of the most elusive concepts to be conceptualized and measured. For example, Linton et al. (2016) provided a detailed inventory of 99 generic self-report measures of adult well-being by exploring the variety of well-being dimensions within these instruments. Using thematic analysis, those researchers identified 196 dimensions of adult well-being that are clustered around six key thematic domains: mental well-being, social well-being, physical well-being, spiritual well-being, activities and functioning, and personal circumstances. The authors concluded that there is little agreement on how well-being should be measured, which dimensions should be included, and accordingly how instruments should be designed. They attributed this kind of disagreement to the ambiguity surrounding the definition and conceptualization of well-being given the multidimensionality of the construct. They suggested that the most appropriate measure of well-being depends on the dimensions of well-being of most interest in each investigation. As to consolidate well-being constructs, Disabato et al. (2019a) attempted in another study to present a hierarchical framework for the measurement of well-being by synthesizing related literature in this respect. Researchers proposed four hierarchical levels of their framework represented in general well-being (i.e., the perceived enjoyment and fulfillment with one's life as a whole), well-being lenses such as subjective well-being, well-being contents like affects, and well-being characteristics such as positive affect.

In spite of the elusiveness of the concept of human well-being, there are different conceptualizations of the concept of well-being in PP. One of the earliest models is the PERMA model which was developed by Seligman (2011). The acronym stood for **P**ositive emotion, **E**ngagement, positive **R**elationships, **M**eaning, and **A**ccomplishment. While developing her EMPATHICS model of learner well-being, Oxford (2016) first considered the PERMA well-being model but concluded that it was theoretically incomplete. Some of the deficiencies in PERMA model that were identified by Oxford were that it focuses exclusively on positive emotions without considering negative emotions, that it incorrectly separated the two concepts of engagement and meaning, that it ignored the role of context, culture, socioeconomic status, politics, religious beliefs, etc., and finally that the term “accomplishment” remained vague. With the aim of increasing the well-being of second/foreign (L2) language learners, Oxford (2016, 2018) attempted to overcome these limitations in her EMPATHICS model which is grounded in the theory of complex systems. The term EMPATHICS is an acronym reflective of 21 interrelated, interacting, and evolving psychological dimensions pertaining to human well-being (Oxford, 2016, 2018):

E: Emotion and Empathy;

M: Meaning and Motivation;

P: Perseverance, including resilience, hope and optimism;

A: Agency and Autonomy;

T: Time;

H: Habits of mind;

I: Intelligences, Imagination, Investment, Identity;

C: Character strengths;

S: Self-concepts, especially self-efficacy.

Table 1 below presents the main dimensions and sub-dimensions in the EMPATHICS model.

In another critique of PERMA, Goodman et al. (2018) concluded that PERMA does not yield a new type of well-being since it does not offer any insights beyond subjective well-being (SWB) due to the high correlation (0.98) identified between these elements of well-being

and SWB in this study. In response to this conclusion, Seligman (2018) clarified that while such high correlation might indicate that SWB is probably the final common path of the elements of well-being, and thus could be considered the single indicator of overall well-being, their assumption that PERMA is redundant and theoretically arbitrary because these two constructs are essentially measuring the same thing is incorrect. Seligman claimed that Goodman et al.'s data are entirely consistent with Seligman's hypothesis and confirming of the claim that PERMA constitutes (at least some of) the elements of well-being hypothesized by Seligman (2011).

Table 1. *Graphical Representation of the EMPATHICS Model of Language Learner Well-Being*

Dimension	Subdimensions
E	Emotion
	Empathy
M	Meaning
	Motivation
P	Perseverance
A	Agency
	Autonomy
T	Time
H	Hardiness
	Habits of mind
I	Intelligences
	Identity
	Investment
	Imagination
C	Character strengths
S	Self-efficacy
	Self-concept
	Self-esteem
	Self-regulation

While the EMPATHICS model is truly comprehensive, the complex interrelationship among the constructs in this model has never been tested and assessed. To date, no instrument has been created to measure the multiple dimensions that are a rather motley collection of constructs that are mostly emotions and affective factors closely related to language classroom. We argue that no instrument has been created so far because it would be unwieldy and overly long. In other words, the EMPATHICS model of language learner well-being needs a theoretical overhaul before it can be operationalized. The overhaul would include the elimination of overlap between the different dimensions

in the model. Interrelated constructs (e.g., motivation and perseverance, motivation and possible selves) ended up in separate dimensions without clear justification despite the fact that close and interrelated associations among these constructs are acknowledged and highlighted in bold font. These overlaps and contradictions in classification make it theoretically and technically difficult to validate the model. Oxford (2016) seemed aware of this fact, emphasizing that the model, after further refinement and validation, could become widely used in the field of language learning. We argue that much more is needed than some superficial refinement. To retain the valuable insights of the EMPATHICS model, it thus needs to be theoretically revisited in order to allow the development of a valid, functional instrument.

REVIEW OF THE EMPATHICS MODEL

In her chapter entitled *Powerfully Positive: Searching for a Model of Language Learner Well-Being*, Oxford (2016) acknowledged the overlaps between many dimensions in the EMPATHICS model. She stated: "The model dimensions are complex, interrelated, interacting, and evolving" (p. 16), "this chapter indicates numerous connections within and across the nine EMPATHICS dimensions by means of bold print" (p. 16), and "the dimensions of EMPATHICS interact in complex and dynamic ways, as shown by the many bold-print indications of interrelationships throughout the chapter" (p. 71).

Oxford (2018) justifies the over-abundance of dimensions in her model by the fact that they all highlight some aspect of the extremely complex, dynamic, and messy nature of language learners' well-being. She postulated that the twenty-one aspects of EMPATHICS interacted with each other and that the relationships are non-linear with a possibility of such relationships pointing to yet-unknown higher-level aggregations or constellations. The problem with this approach is that by including such a large number of dimensions, it becomes impossible to have sufficient depth to match the enormous width. Indeed, if each dimension were to have five items, there would be 105 items for the dependent variable alone. The other objection would be that well-known dimensions such as motivation would have to be truncated from over 100

items in the original instruments (Gardner, 1985) to a mere five. How could such a selection do justice to the complexity of the concept? The other side of the question is whether a radical pruning of the EMPATHICS dimensions would not betray Oxford's (2016, 2018) original intention. Would it have been preferable to stick to the PERMA dimensions that have been satisfactorily operationalized (cf. Gregersen et al., 2019)? We ask the reader to suspend any judgment as we explain how a revised EMPATHICS model could retain its original intentions while becoming a potentially useful model for research.

PRUNING AND RE-ORGANIZING THE EMPATHICS MODEL

In the EMPATHICS model, dimension (I) pertaining to Intelligences, particularly emotional intelligence (EI), which is conceived by Mayer and Salovey (1997) as the ability to, 1) perceive, appraise, and express emotions accurately and adaptively; 2) understand emotions and emotional knowledge; 3) access and/or generate feelings when they facilitate cognitive activities and adaptive action; and 4) to regulate emotions in oneself and in others, could be merged with Dimension (E) Emotion and Empathy. EI can be argued to represent the whole dimension of Intelligences elaborated in the model. It could be assumed that EI can stand to represent learner intelligences because, as originally stated by Oxford (2016) in the chapter, "EI overlaps with intrapersonal intelligence and interpersonal intelligence, two of the multiple intelligences described by Howard Gardner." (p. 16). We also hypothesize that EI could be merged with the dimension of Emotions (E) due to the close relationship between learner EI and emotions in many ways. First, EI helps learners identify their emotions when learning a L2. In this respect, language users who scored higher on EI in the study by Dewaele et al. (2019) were better at recognizing emotions. Secondly, EI has been found to be positively linked with learners' positive emotions, including L2 enjoyment (e.g., Li & Xu, 2019; Resnik & Dewaele, 2020, 2021; Resnik et al., 2021). For example, a six-week intervention conducted by Li and Xu (2019) conducted for boosting the EI of 56 Chinese high school students was effective. Learners became more aware of their own emotions and reported increased

enjoyment and reduced anxiety over time. In the same vein, Li (2020) demonstrated that EI was a positive predictor of enjoyment as well as language achievement. In addition, the relationship between students' EI and actual achievement was mediated by their enjoyment for learning English. In this study, student EI was negatively correlated to L2 learners' negative emotions. This relationship confirmed the findings of Dewaele et al. (2008) that found that multilinguals who scored higher on trait emotional intelligence reported lower levels of language anxiety when using their different languages in a variety of situations. Authors attributed this negative association between the two variables to learners' increased confidence in their ability to convey and recognize emotions, and to overcome communication obstacles. Similarly, Shao et al. (2013) found that learners who were more emotionally intelligent generally demonstrated a lower level of L2 anxiety.

The theoretically close relationship between language learner EI and emotions has been initially acknowledged by Oxford (2016) when she stated: "Emotional intelligence includes the ability to do the following: perceive emotions in self and others; use emotions to facilitate cognition; understand emotions; and manage emotions in self and others" and "it is possible to transform negative emotions into positive emotions by developing greater emotional intelligence" (p. 16).

Oxford (2016) highlighted that one problem with the PERMA model is that it considered Engagement as a separate dimension and that it should be merged with Meaning since, there will be no engagement unless there is meaning for that. We, however, propose that engagement be treated as a unique construct due to its significance for learner well-being. Engagement could be aligned with the dimension of emotions, because the construct of Engagement is closely related to learner emotions. According to Hiver et al. (2021), learner engagement can be conceptualized in terms of "how actively involved a student is in a learning task and the extent to which that physical and mental activity is goal-directed and purpose-driven" (p. 3). Several empirical studies in the field of L2 acquisition suggest that students' engagement is largely defined by their emotions in the course of L2 learning, and that positive emotions are related to higher motivation and engagement (Dewaele & Proietti Ergün, 2020; Dewaele et al., 2023), while

negative emotions were related to lower engagement (Baralt et al., 2016; Dewaele & Li, 2021; Dewaele & Proietti Ergün, 2020; Dewaele et al., 2023; Henry & Thorsen, 2020; Lambert et al., 2017). In this regard, Mercer (2019) argued that learner engagement is demonstrated by expressing positive emotions such as enjoyment, enthusiasm, and anticipation, while disengagement is represented by negative emotions such as anxiety, boredom, frustration, and anger. Khajavy (2020) used a path model that showed that L2 grit and L2 emotions are predictors of L2 engagement. In this model, enjoyment positively predicted L2 engagement while anxiety was not a significant predictor of L2 engagement. Khajavy concluded that these findings confirm Fredrickson's (2001) broaden-and-build theory that positive emotions increase engagement, and support the assumptions presented by earlier studies (e.g., Boekaerts, 2016) that emotions can be like sparks that ignite or put off learner engagement.

We contend that Dimension (P) pertaining to Perseverance, a person's continued investment of energy in long-term pursuits (Feng & Papi, 2020), in the model cannot stand as a separate dimension by itself. Because perseverance in learning a L2 is one component of grit to learn L2 (see Alamer, 2021; Duckworth, 2016; Li & Dewaele, 2021; Oxford & Khajavy, 2021; Resnik et al., 2021; Teimouri et al., 2021), this dimension might come under grit as a new construct in language learner well-being that was overlooked in the original EMPATHICS. The concurrent validity analyses in the study of Disabato et al. (2019b) showed that perseverance of effort was moderately to strongly related to subjective well-being, beliefs about well-being, and personality strengths. Therefore, perseverance as an important component of learner grit could be merged under learner character strengths (i.e., the positive qualities of the individual character that enable him/her to perform to the best of his/her ability), as suggested by past research (e.g., Khajavy, 2020). Duckworth et al. (2007) also pointed out that hardness of character and perseverance can enhance a number of important learning skills, such as creative thinking and engagement, as well as the ability to cope with adverse circumstances in both academic and vocational settings (Heckman & Mosso, 2014; Roberts, 2009).

Another possibility for the construct of perseverance is that it might be merged with the dimension (M) Motivation and Meaning. Indeed, Gardner (2001) identified persistence – the concept that is closely related to perseverance – as one of the three key elements in language learning motivation (see Oxford, 2016, p. 29). In addition, hope, which is one component of perseverance, includes time perspectives, aspects related to the concept of meaning and accordingly motivational features. Further, optimism, another component of perseverance, is particularly linked to expectancy-value theories of motivation. The links between perseverance and motivation are supported by large body of past research. In the study of Feng and Papi (2020), perseverance resembles the notion of persistence. The results of this study suggested that learners with high levels of perseverance tend to set long-term goals, which in turn further motivate them to invest in and work hard at studying the language. Feng and Papi found that of the two subscales of L2 grit, perseverance of effort had significant correlations with L2 motivation (i.e., ideal L2 self/own, ought-to L2 self/own, and motivational intensity). Likewise, Alamer (2021) found that the two components of L2 grit (L2 consistency of effort and L2 perseverance) were positively correlated with two aspects of L2 motivation: the ideal L2 self and motivational intensity. Finally, Teimouri et al. (2022) found that grit was strongly related to L2 motivation in that the perseverance of effort sub-component of grit measures revealed a much stronger association with all the motivational and emotional factors than the consistency of interest subcomponent, a pattern that emerged in similar studies (Lake, 2013; Teimouri et al., 2021) where grit has also been found to be closely associated with students' motivation.

There are some other dimensions in the EMPATHICS model that are in fact motivational constructs and can be therefore merged under the dimension of Motivation (M). One example is Dimension (A) pertaining to Agency, the perceived ability and intention to find and use strategies to achieve goals (Oxford, 2016), and Autonomy [the capacity to take charge of one's own leaning based on his desire, ability, and degree of freedom (Benson, 2001)]. This dimension could be merged with Dimension (M) Motivation and Meaning for the following reasons. In the light of self-determination theory (SDT) perspectives (see Deci & Ryan, 1985, 2000; Ryan & Deci, 2020),

individuals strive to develop an environment where their basic psychological needs (BPN) of autonomy, competence, and relatedness are satisfied. According to Alamer and Almulhim (2021), these BPN are the essential components for learners to grow and endorse autonomous motivation. The principles of SDT suggest that learners will have the motivation to learn when they feel satisfaction in the language learning process, by having a sense of autonomy, competence and relatedness (Alamer & Lee, 2019; Noels, 2001; Noels et al., 2003). This theory suggests that more autonomous and internalized forms of motivation (i.e., intrinsic orientation and identified orientation) would develop in learners when they perceive a sense of autonomy, competence, and relatedness with others (Alamer & Lee, 2019; Ryan & Deci, 2000). In this regard, autonomy was directly linked to the internal form of motivation from the SDT framework in the study of Alamer and Lee (2019). This finding confirmed the association between autonomy and intrinsic motivation (Noels, 2001; Reeve et al., 2008). Another link was established between autonomy and perseverance as a component of learner motivation where it is suggested that language learners with a sufficient amount of autonomy might be consistent in their perseverance (Alamer, 2022; Clément et al., 1994; Dörnyei & Ushioda, 2009; Hiver et al., 2020; Noels, 2013; Shirvan & Alamer, 2022). In the study of Shirvan and Alamer (2022), students' self-perception of autonomy was the only variable among the three basic needs that related to perseverance of effort as well as consistency of interest in the learning of the L2 (both are two components of L2 grit).

The theoretical links between learner autonomy and motivation elaborated above are acknowledged by Oxford (2016), who stated that “In SDT, intrinsic motivation also requires supportive self-perceptions in the areas of autonomy (capability of self-regulating one's thoughts, learning, actions and interactions), competence and relatedness to others” (p. 26). This has been supported by other investigations of SDT (e.g., Benson, 2013), which found that learners' sense of self-determination increased with autonomy-supportive teachers.

In addition to autonomy, Agency, which has been conceptualized by Oxford (2016, p. 27) as “the power to act volitionally to influence outcomes,” is related to two motivational components: possible selves and

perseverance. Oxford added that “the agentic person is [the] origin of his or her actions, has high aspirations, perseveres in the face of obstacles” (p. 38), and might therefore be merged with them.

Oxford (2016) stated that “meaning is inextricably linked with motivation, because a goal must be meaningful for the person to be motivated” (p. 24). For this reason, Meaning will be comprised under motivation because a sense of meaning is crucial to have motivation to pursue goals in individual's life (Keltner, 2009; Oxford, 2016).

Besides motivation, Oxford (2016) proposed that autonomy is related to meaning which she described as “personal relevance and significance that give purpose to life” (p. 18). Oxford asserted that “in functional self-determination theory (fSDT), the agentic individual controls his or her behavior (self-determination), despite not having control over events and outcomes” (p. 39); suggesting that “to create meaning, individuals must strengthen their autonomy” (p. 40); “the meaning of life might be discovered through responsibility” (p. 20).

Among the dimensions that could also be merged under the (M) Motivation and Meaning dimension is the Time (T) dimension, pertaining to time perspective which is conceptualized by Boniwell (2012) as a preferential trajectory or direction of an individual's thought toward the past, present or future, which exerts a dynamic influence on his or her experience, motivation, thinking and behavior. Oxford (2016) defined the role of time perspective in language learning in the sense of possible selves. She primarily indicated that “motivation, imagination and possible selves interact, and they are related to time perspective” (p. 27). Oxford added that “ideas about language learners' possible selves suggest that time present and time past are indeed both perhaps present in time future” (p. 44). She continued:

Consider the ideal L2 self, a motivational self guide that is built on largely on images from the past and that helps shape our present and future behavior. In this sense, “all time is eternally present.” Possible selves exist not only in the future but also in the past and present. (p. 45)

In support of this, Ryan and Irie (2014) postulated that motivation depends on imagination, which helps us define

imagined identities known as possible selves. According to them, possible selves are not just in the future but also in the past and present. The way we see ourselves in the present is dependent on how we interpret our past experiences. These interpretations enable us to project images of ourselves into the future (Oxford, 2016). Out of the kinds of possible selves, Higgins (1987) focused on only two self-guides: the ideal self and the ought self. While the former refers to or hoped-for attributes, the latter represents the representation of attributes that the person believes he or she ought to possess. In Higgins's view, motivation involves the person's desire to reduce the discrepancy in behavior between the present actual self and the future-oriented ideal and ought selves. Building on Higgins's ideas, Dörnyei (2009) introduced the L2 motivational self system. In this system, the primary elements are two future self-guides – the ideal L2 self (the L2-specific aspect of the person's ideal self) and the ought-to L2 self [corresponding to Higgins's (1987) ought self].

There are also two constructs pertaining to Self-constructs that are in fact motivational factors and could therefore be merged with Dimension (M) Motivation and Meaning. For instance, self-efficacy could be merged with perseverance (one component of motivation). Self-efficacy is the person's level of confidence (belief) that he or she can successfully carry out an action to achieve a specific goal in a particular setting under certain conditions (Bandura et al., 1997). Self-efficacy is related to possible selves in that we use our interpretations of past events to make attributions (internal explanations) for our perceived failures and successes, and these attributions help us develop self-efficacy, that is, our current assessment that we can succeed at a given task in a particular context (Bandura et al., 1997).

Oxford (2016) indicated that future time perspective is associated with a number of positive outcomes, such as self-efficacy and high motivation. Self-efficacy is related to perseverance in that people's beliefs in their capabilities to produce desired effects by their own actions determines how much they persevere in their efforts in the face of obstacles and challenges (Maddux, 2011). In addition to its categorization as a motivational factor, self-efficacy could be conceived as a learner character strength. A good number of past studies recognized that character strengths are related to self-

efficacy, life satisfaction and greater happiness (Peterson & Park, 2009; Piasecka, 2016).

In addition to self-efficacy, Self-concept could be merged with possible selves (under Motivation). According to Oxford (2016), self-concept which is the picture that is evaluated by the self (Rubio, 2014) includes among other things the past, present and future selves. Mercer (2011) clarified that “language learners' self-concepts are part of a complicated network of self-beliefs and are formed through a myriad of interconnected factors, all of which may be processed differently depending on other psychological factors and motivations within the individual” (p. 167). In addition, Dörnyei (2009, p. 18) established that “future self-guides have a major function for motivating learners. Language learners are motivated to reach a condition where their self-concept matches their personally relevant self-guides.”

Self-esteem is a third self-factor that entails motivational characteristics. According to Dörnyei (2005, p. 211), self-esteem is “the [high–low] evaluative quality of the self-image or self-concept. This construct is similar to self-concept in that they are built around two main components, namely competence and worthiness.” It could be suggested that self-esteem is dependent on students' self-rating and that it therefore could result from the relationship between the actual self and the ideal self. This highlights the connections between learner self-esteem and his/her possible selves, which are a motivational component.

The concepts of hardiness and grit are two cognitive concepts that could be merged under Motivation. Hardiness, as perceived by Maddi (2004), is a personality disposition that can moderate the impact of chronic stressors on mental and physical health. While hardiness appears akin to resilience, Oxford et al. (2015) emphasized that the two concepts are different in the scope and scale. They assumed that resilience is the ability to rebound from adversity, while hardiness is having the courage to do so. In addition, Maddi (2006) postulated that hardiness precedes resilience because it uses stress as a positive force, fosters the development of creativity and adaptivity, and thus improves short-term performance.

In addition to hardiness and grit, some habits of mind (i.e., behaviors that individuals habitually use to reach

their best performance) listed in the chapter might be merged under Motivation and Meaning like persisting (perseverance), creating, imagining, and innovating, taking responsible risks; responding with wonderment and awe, and remaining open to continuous learning. In addition, other habits of mind might be merged under Autonomy and Agency, and therefore under Motivation due to Oxford's (2016) argument that Habits of mind are closely related to self-regulation, autonomy and agency. Besides the above listed habits of mind, some character strengths in the chapter might be merged under Motivation and Meaning like creativity, curiosity, love of learning, open mindedness, perspective, bravery, persistence, zest, leadership, teamwork, self-regulation, prudence, hope, humor, spirituality. We argue, however, that these habits of mind and character strengths are inherent in other motivational factors like autonomous motivation, possible selves, autonomy, and so on, and could be therefore incorporated under these constructs.

We suggest that several habits of mind might be merged under Empathy, such as listening with understanding and empathy and thinking interdependently. In addition, there are some character strengths that might be merged under Emotion and Empathy, such as authenticity, kindness, love, social intelligence, fairness, forgiveness/mercy, modesty/humility, appreciation of beauty and excellence, and gratitude. Since these variables pertain clearly to the emotional and empathic characteristics of the individual, they could be repositioned under the construct of Emotions and Empathy rather than being distinct constructs on their own.

Finally, there are some variables in dimension (H) pertaining to Habits of mind that might be merged with Dimension (C) Character strengths. Oxford (2016) stated that "an individual's habits of mind and character strengths, such as open-mindedness, creativity, and curiosity, are directly related to each other; both sets of qualities are positive, intensely embedded, and habitual" (p. 33); and "many of the (...) character strengths, such as creativity, curiosity and open-mindedness, overlap with habits of mind, described earlier. This stands to reason, because character strengths, like habits of mind, are habitual, deeply rooted and positive parts of the individual" (p. 60). Other habits of mind that might be merged under

character strengths include managing impulsivity, flexibility, finding humor.

DISCUSSION

The original EMPATHICS model could be described as an acronym-driven, rather than theory-based model. The overlapping dimensions makes any attempt at validation impossible for both theoretical and technical reasons. The first is that the model contains 21 main dimensions and tens of subdimensions. Validating a model that contains so many constructs would require a survey of hundreds of items that no learner would agree to fill out. The second reason is that the amount of theoretical overlap is such that any validation attempt would be doomed. The overlapping constructs would lead to inflated correlations and raise the issue of multicollinearity which is a critical threat to the validity of any model (Alamer & Marsh, 2022). In addition to these reasons, we believe that some of Oxford's (2016) criticisms of the PERMA model are not totally accurate and should therefore be reconsidered. In this respect, we believe that having a separate dimension for Engagement in the PERMA model is accurate due to the key role of learner engagement for his/her well-being. For this reason, in our new E4MC model (see Table 2) we aligned with PERMA and had a unique dimension for Engagement. With regard to meaning, we believe it could be merged under Motivation due to close associations and overlapping between these two dimensions, as emphasized by Oxford herself in her chapter about EMPATHICS. Finally, Oxford maintained that the exact role of context, culture, socioeconomic status, politics, religious beliefs, and accomplishments were not clearly emphasized in PERMA. We argue that the role of such variables was not properly acknowledged in the EMPATHICS either. We therefore argue that such factors do play a role, but that they are external to the E4MC dimensions. There is accordingly no need to treat them as separate learner-internal dimensions.

We argue that the EMPATHICS model could be reduced to three general dimensions of learner well-being: E, M, and C. The first dimension, E, in the E4MC model, pertains to Empathy, Emotions, Emotional intelligence, and Engagement. According to Oxford (2016), Empathy includes a whole constellation of feelings such as sympathy, compassion, soft-heartedness, tenderness.

Emotions on the other hand are either positive emotions like enjoyment, hope, optimism, pride, etc., or negative emotions like anxiety, frustration, stress, fear, etc. Emotional intelligence that involves factors like emotionality, self-control, wellbeing, and sociability could be added under dimension E with Emotions. In addition, learner Engagement represented in behavioral, cognitive, emotional and social aspects of engagement might be also added to the E dimension.

Table 2. *Graphical Representation of the E4MC Model of Language Learner Well-Being*

Dimension	Subdimensions
Emotions	Positive emotions (e.g., enjoyment) Negative emotions (e.g., anxiety)
Empathy	Sympathy Compassion
Engagement	Emotional engagement
Emotional intelligence	Emotionality, self-control, wellbeing, sociability
Motivation	Autonomous motivation Possible selves
Character strengths	Grit Hardiness Self-concepts

The second dimension, M, in the E4MC model, refers to Motivation and Meaning and involves autonomous motivation that inherently comprises intrinsic motivation, autonomy, and agency. Autonomous motivation had a special emphasis in the EMPATHICS model because, according to Oxford (2016), intrinsic motivation integral to learners' self-determination which is one of the possible criteria for flourishing and well-being. Possible selves involving times perspectives would be another motivational factor. The third dimension, C, in the E4MC

model, represents Character strengths and involves some of the personal qualities that enable an individual to approach learning with confidence and commitment like grit (including perseverance, resilience, and passion), self-efficacy, self-esteem, creativity, hardiness, and self-regulation. Table 2 presents the graphical representation of the components of the E4MC model.

CONCLUSION

In order to overcome the theoretical and methodological hurdles that stood in the way of any operationalization of Oxford's (2016, 2018) EMPATHICS model, we designed a trimmed-down E4MC model that retains the main strengths and the richness of the EMPATHICS model and opens the way to the development of a new instrument. Both the model and the future instrument will definitely need to be validated to assess its reliability and validity to be used with L2 learners across different contexts. This could be obtained by deploying structural equation modeling (SEM) approaches such as confirmatory factor analysis (CFA) and/or exploratory structural equation modeling (ESEM). These analytical methods will help in establishing and understanding the underlying factor structure of the constructs of the revised model. We conclude that the E4MC model might be a more realistic and useful model than Oxford's EMPATHICS model and we look forward to its operationalization. Despite the fact that the E4MC conceptual model is chiefly conceptualized around language learner well-being, we believe the usefulness of this model could be extended to L2 teachers. We agree with Talbot's (2021) suggestion that the original EMPATHICS can be integrated into the thematic framework of language teacher well-being in relationship to one or more domains like positive or negative emotions (e.g., enjoyment and anxiety). The E4MC model offers a similar template.

Authors' contributions

FA designed the study. FA and JMD drafted the manuscript and participated in the interpretation of the analytical review. Both authors read and approved the final manuscript.

Ethics approval

This study was approved by the University Scientific Council from the first author's research institution.

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