

INTERPERSONALLY-BASED FEARS DURING THE COVID-19 PANDEMIC: REFLECTIONS ON THE FEAR OF MISSING OUT AND THE FEAR OF NOT MATTERING CONSTRUCTS

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Abstract

Severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) is currently spreading in all the areas of the world. This ongoing pandemic has clear impacts in terms of the relevance of psychological needs. Psychological needs such as self-esteem, self-actualization, and relatedness only become relevant once basic physiological needs and safety and survivor needs have been satisfied. Because psychological constructs are not objectively existing constituents of reality but rather efforts to represent it, they tend to become more or less relevant and salient as a function of prevailing conditions. Starting from this premise, the current paper focuses on the relevance that fears with an interpersonal basis (i.e. the fear of missing out and the fear of not mattering) have during a period in which physical distancing or “social distancing” has been implicated as a crucial important public health intervention that can help stop transmission of the coronavirus. We underscore how the current health crisis impacts the self and identity of people who are confronted with the discrepancy between their usual psychological needs and current realities.

Key words: psychological needs, fear of missing out, fear of not mattering, loneliness, stressful events

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Man is by nature a social animal; an individual who is unsocial naturally and not accidentally is either beneath our notice or more than human. Society is something that precedes the individual. Anyone who either cannot lead the common life or is so self-sufficient as not to need to, and therefore does not partake of society, is either a beast or a god
(ARISTOTLE, 350 B.C.E.)

The 2020 outbreak of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is currently being experienced in all the areas of the world. The coronavirus outbreak was deemed to be a pandemic by the World Health Organization (WHO) on March 11th, 2020. The WHO pointed to the more than 118,000 cases of the coronavirus in over 110 countries and territories and the sustained risk of further global spread. As of April 2, the 2019-nCoV was wreaking havoc in 180 countries/territories and health authorities identified more than 960,000 coronavirus disease (COVID-19) cases around the world, with an average mortality rate of 5.1%.

The current article focuses on the experience of fear as result of the pandemic with a particular emphasis on understanding people prone to fears with an interpersonal basis. Specifically, we consider what it is like at present to be someone who typically has a fear of missing out or a fear of not mattering to other people. Our analysis includes an emphasis on key psychological needs that have become highly relevant and how the current crisis impacts the self. Below, we describe the fear of missing out and the fear of not mattering in greater detail. We

then consider the impact of the pandemic on people with these abiding fears. First, however, we consider the pandemic in terms of its characteristics with an emphasis on the psychological impact of the pandemic as a unique, shared psychological situation.

The COVID-19 Pandemic as an Objective and Psychological Situation

It is rare for authors to analyze a situation of such magnitude as it continues to unfold. The definition of this global health crisis as a pandemic implies that countries need to accelerate their efforts to contain it by also looking for a balance between protecting health and preventing economic disruption. Given the context where every country has the responsibility to determine the nature and timing of measures introduced to slow down the viral transmission, physical distancing or “social distancing” has been implicated as a crucial important public health intervention that can help stop transmission of the coronavirus. As a consequence, many jurisdictions around the world have ramped up laws to enforce social distances. These public interventions imply a reduction of the personal mobility and, in many countries, there is the mandatory rule to leave home only for essential activities. Various countries have declared an absolute quarantine, allowing only transfers to buy foods or for health reasons. Accordingly, millions if not billions of people have begun working remotely in recent weeks; schools and universities have canceled face-to-face classes; and restaurants, bars, gyms, and

other gathering places in many countries have shuttered. Face-to-face social contacts need to be avoided and, when this is not possible, a physical distance needs to be maintained.

It is generally accepted in the broad psychological literature that there are times and contexts in which the situation has a strong influence on people. This is one of those times. In fact, it can be argued that as a situation that impacts people's lives, there has not been a time like this since World War II. When we focus on the COVID-19 outbreak as a global pandemic, what will soon happen is still uncertain and unknown. The current situation emphasizes the similarities shared by people and nations around their world, rather than their differences. However, we cannot lose sight of the fact that the situation is more challenging in some countries more than in others, at least at present, and within cultures, some people have more risk and exposure as a function of their occupation, living conditions, and socioeconomic standing.

Decades of research on the person-situation interaction tells us that to understand the behavior of an individual person, there is a need to consider both characteristics of the individual and the situation (Magnusson, 1999). Endler (1983) distinguished between mechanistic and reciprocal models of interactionism, especially when focused on our understanding of trait and state anxiety. Mechanistic models focus on how situations influence people but reciprocal interactionism models allow for the possibility that not only does the situation have an influence on the person, the person can also have an influence on the situation. The appropriateness of this reciprocal view has been supported in empirical research (Emmons, Diener, & Larsen, 1985). It seems appropriate to adopt this view because it supports the key message that people are not helpless and everyone can have a key role in making the situation better or worse.

Objectively, the pandemic and the realistic threat of contracting COVID-19 means that it is now quite reasonable for people to be on alert and highly sensitive to threat and take precautions such as social distancing. Fear, anxiety, and worry are now quite normal and to be expected (for a discussion, see Ahorsu et al., 2020; Pakpour & Griffiths, 2020); normalization makes fear less unique to particular individuals. There are also clear implications that realistic threat has in terms of how personality constructs should now be regarded. For instance, being a perfectionist seems less dysfunctional during those times in life when making a mistake can cost someone her or his health and perhaps life.

The ongoing pandemic has clear impacts in terms of the relevance of psychological needs. The classic hierarchy model of needs espoused by Maslow (1962, 1971) as part of his humanistic theory is based on the premise that psychological needs such as self-esteem, love, and self-actualization only become relevant once basic physiological needs and safety and survivor needs have been satisfied. The emphasis has clearly shifted from growth motives to deficiency motives and basic issues of survival for many people.

Maslow's hierarchy proposes that belongingness and love become the focus beyond safety needs. Since the first half of the last century, theorists of social psychology and personality have speculated about the psychological processes underlying the individuals' motivation toward relationships with others. In 1938, Henry Murray developed his motivational theory of personality and identified in universal basic needs essential and powerful forces directing human

behavior. According to Murray, how strongly each need is felt contributes to the uniqueness of personality and individual differences. Murray included the need for affiliation - a social form of motivation involving a need to seek out and enjoy close and cooperative relationships with other people - among these basic needs. The stronger need for affiliation, the higher the person's psychological distress when circumstances prevent the achievement of some sense of belongingness. The Self-Determination Theory (Ryan & Deci, 2000) identifies relatedness (i.e. the will to interact with, be connected to, and experience caring for others) among the three universal innate needs that, if satisfied, allow optimal function and growth. These theories acknowledge that humans are inherently social. Although social behaviour may occur in organisms lacking a nervous system (Gibbs, Urbanowski, & Greenberg, 2008), the preservation of social relationships is essential mainly for human beings and such a tendency towards social connection is linked to the innate pleasure that people derive from interpersonal contacts.

Whereas the current pandemic has drastically reduced face-to-face social contacts, experimental research has shown that anxiety increases the need to affiliate with others who are going through the same situation or that could help through stressful events (Schachter, 1959). On the one hand, stressful situations increase the need to receive social support. On the other hand, stressful events characterized by ambiguity in terms of low levels of personal control over the situation amplify the need to stay with others as a means of socially evaluating and determining the appropriate reaction.

The observations and conceptualizations outlined above combine to suggest that people who typically are highly focused on their interpersonal needs and who have unmet core needs will be people who will particularly suffer as a result of the current pandemic and imposed conditions of social isolation. Maslow (1971) posited that it is under such conditions that such people experience neurosis as a lack of personal growth. Specifically, he observed, "It is falling short of what could have been, and even, one can say, what should have been ... Human and personal possibilities have been lost" (Maslow, 1971, p. 32).

The next segment of this article considers the implications for people who are high in levels of the fear of missing out and the fear of not mattering to other people. In general, anxiety, fears, and worries should be magnified and substantially heightened. It is helpful to keep in mind the nature of anxiety and worry that people are currently experiencing when considering such fears as the fear of missing out and the fear of not mattering to others. It has been established across several empirical investigations that uncertainty is a factor that heightens emotional arousal and anxiety in ways that can add to threat perceptions (Endler, Speer, Johnson, & Flett, 2000; Endler, Speer, Johnson, & Flett, 2001). Individuals are more prone to anxiety and repetitive worry as well as psychological stress to the extent that they feel a lack of personal capable or sense of self-efficacy to control and overcome current uncontrollable situations and anticipated future circumstances (see Borkovec, Metzger, & Pruzinsky, 1986; Flett & Blankstein, 1994). This perceived deficit in the self has particular implications for people with the fears described below.

While much of the focus on anxiety has been on the health risk to self and others of having the COVID-19, another type of anxiety that merits more focus stems from the isolation and separateness that people face. It

is now generally accepted that people of all ages can suffer from separation fears and separation anxiety, and there is an extensive literature on the experience of separation anxiety among adults (e.g., Manicavasagar, Silove, & Curtis, 1997; Manicavasagar, Silove, Curtis, & Wagner, 2000). In fact, Endler and Flett (2004) extended the trait model of anxiety by including interpersonal facets that reflected trait anxiety about self-disclosure and trait anxiety due to separation from other people. Accordingly, people who have a high level of trait separation anxiety and who are in physical isolation situations will be in need of finding ways to stay connected with other people in order to combat their separation anxiety. Some people in particular have all the motivation they need to find novel ways to stay connected with other people despite finding themselves in conditions of physical isolation.

We now consider the fear of missing out in more detail. This fear has received extensive empirical attention in recent years.

The Fear of Missing Out

Pryzbylski, Murayama, DeHaan, and Gladwell (2013) proposed the concept of “Fear of Missing Out” (FoMO), as a salient example of the subjective experience that a person might encounter when his or her need for relatedness remains unsatisfied. FoMO has been defined by these authors as “the pervasive apprehension that others might be having rewarding experiences from which one is absent” p. 1841). Because social media might constitute an ideal environment to mitigate this “desire to stay continually connected with what others are doing,” FoMO has recently received great scientific attention in the field of problematic social media use (Przybylski et al., 2013, p.1841). Support for the positive association between FoMO and unregulated use of social media has been provided by several researchers (e.g., Blackwell, Leaman, Trampusch, Osborne, & Liss, 2017; Casale, Fioravanti, & Rugai, 2018). Recent research has also shown that elevated FoMO levels are associated with different unhealthy behaviors (e.g., alcohol use, Riordan, Flett, Hunter, Scarf, & Conner, 2015; problematic smartphone use, Lo Coco et al., 2020) and negative outcomes, including sleep problems (Scott & Woods, 2018). In brief, there is initial evidence that FoMO is a promising construct to explain some human experiences and behaviors derived from the unmet need of relatedness.

Psychological constructs tend to offer a static view of reality in which the created theoretical objects play a central role (Slaney & Garcia, 2015). However, psychological constructs are not objectively existing constituents of reality but rather efforts to represent it. Billig (2011) warned that social scientists should not forget the “fictional” nature of the “things” they have created. Some psychological constructs (e.g., higher-order personality traits) have been shown a good stability with respect to their construct and predictive validity throughout time, but others concepts might not show the same pervasiveness and effectiveness in describing the human experience. The meaningfulness and ability of some hypothetical constructs to describe, summarize, represent, encapsulate and, ultimately, explain the human experience might be context or situation-dependent.

How is this relevant to FoMO? Given that social experiences are reduced or forbidden in the pandemic period, on one hand, and FoMO is a form of anxiety related to others’ social rewarding experiences, on

the other, one might argue that FoMO levels might decrease in a pandemic time. As a consequence, unhealthy behaviors and negative outcomes related to high levels of FoMO should show a decrement as well. However, the construct of FoMO includes, by definition, the possibility for significant others to have fun or rewarding experiences, meet up with friends, go on vacation and planning get-together. That is, FoMO refers to a personal feeling of not being involved in what is going on – but something needs to go on in order to experience this fear. We argue that FoMo has been diminished as a useful construct to describe the human experience during a pandemic, because the aspects of the psychological reality that this construct is intended to represent are either missing or have been drastically reduced.

Consider the sources of anxiety that are believed to elevate levels of FoMO and sustain it. What are people afraid of missing out on? This phenomenon is linked with fears on opportunities to spend time with and interact with friends as well as have opportunities to remain cognizant of what friends are doing and keep track of what they are doing. Social isolation takes away opportunities to engage with others in order to assess what they have been doing. Moreover, social isolation also restricts the range of what friends are actually doing because behavior is severely constrained.

However, this does not meet that the current plight of people with elevated FoMO has been diminished. The need for ego validation and validation that underscores social media use among young people is clearly evident in normal circumstances (Throuvala, Griffiths, Rennoldson, & Kuss, 2019), but there are now fewer opportunities to resolve this need. It is likely the case that people with FoMO might currently undergoing a sense of identity disturbance in line with the identity processes described at length by Erikson (1963). There is no obvious meaningful way for these people to resolve their current identity crisis. Ideally, they are much more focused on the pandemic crisis rather than personal concerns because failure to take appropriate precautions due to an egocentric focus on psychological needs may have dire consequences.

Analyses of the FoMO phenomenon tend to focus on the social comparison element of this construct. We describe this as the need to keep up with other people. As part of her seminal work, Karen Horney (1937) discussed at length how such tendencies are rooted in the culture in which people are raised. She observed that when there is a change in the external environment, people who persist in having a neurotic need to compete with others will still try to compete and compare with other people who are not engaged in competition. This analysis underscores the failure to adapt that is currently facing many people who have FoMO as a core part of their self.

We now discuss the fear of not mattering to other people. As is suggested below, this fear is more pertinent at the present time in part because there are more obvious ways of alleviating this fear.

Mattering and the Fear of Not Mattering to Other People

The fear of not mattering to other people is likely associated with the fear of missing out because they both reflect a negative or uncertain sense of self and a need for validation through connection from other people, but the fear of not mattering to others is quite distinct. Rosenberg and McCullough (1981) introduced

the mattering concept. Mattering is both a need and a feeling that involves knowing that you are significant to other people. Initially, they proposed three components: (1) feeling like you are someone who is depended on by other people; (2) feeling like you are someone who is important and significant to other people; and (3) feeling like you are someone who is receiving the attention of other people. Someone who feels like they are getting the attention she or he deserves is someone who feels a sense of being seen by others and heard by others. They feel like they count and other people will take care of them. Rosenberg (1985) added a fourth component when he emphasized that mattering is also experienced when people express that they would miss you if you were not around. Schlossberg (1989) then described a fifth element based on her work with caregivers. Specifically, she also discussed the feeling of mattering in terms of others having expressed their appreciation for what someone does for them and who they are as a person. Flett (2018b) also emphasized that the feeling of mattering is rooted in the sense of individuation. Specifically, it was observed that, "Mattering clearly involves the feeling of being uniquely special when we are engaged with and cared for by someone who sees our unique qualities and they seem to cherish the person's unique true self. These people often seem positively influenced and impressed by positive attributes and tendencies that other people don't seem to see or realize" (p. 33). This component makes mattering feel highly personal in ways that align with the feeling someone has when one warm and caring person is focused on them.

Various authors have noted that mattering is related to other psychosocial constructs such as belongingness and social support (see Elliott, 2009; Flett, 2018b). However, research and theory is based on the premise that mattering is distinct from these other constructs because of its emphasis on a person's perceived importance to other people. Mattering is more focused on the sense of having value to other people. The uniqueness of mattering was demonstrated by Rosenberg and McCullough (1981) in their original work. They showed with data from four large samples of adolescents that perceived mattering to parents went beyond self-esteem in predicting levels of distress and other indicators of poor adjustment.

Flett (2018b) argued that mattering is only just beginning to receive the attention it deserves in the psychological literature. Evidence is growing for the protective role of a feeling of mattering in terms of levels of personal well-being and resilience and arguments have been advanced for the promotion of mattering in order to enhance resilience (see Flett, 2018a). In contrast, deficits in feelings of mattering are linked with various forms of psychological distress, including depression (Flett, Sue, Ma, & Guo, 2016; Taylor & Turner, 2001), and feelings of not mattering have been linked with health problems and greater physical susceptibility to stress (Taylor, McFarland, & Carr, 2019).

Research thus far has focused on subjective self-reports of perceived levels of mattering to others as assessed by measures such as the General Mattering Scale. At present, the fear of not mattering has not been studied in the psychological literature, though recent pilot data collected by Flett and associates suggest that there are salient and meaningful individual differences in the levels of fear of not mattering that are related to trait mattering but predict beyond existing measures of mattering.

A recent commentary article by Flett and

Zangeneh (2020) considered at length how mattering is a psychological resource that should prove highly protective in terms of buffering the anxiety that people experience throughout the pandemic. They included a particular focus on the importance of feeling a sense of mattering in one's community and particular ways to promote mattering in the community were outlined.

Flett and Zangeneh (2020) noted that the mattering construct is highly relevant right now because of existing evidence which suggests there is a very strong association between feelings of not mattering and loneliness (see Flett, Goldstein, Pechenkov, Nepon, & Wekerle, 2016). There is great concern at present about how having to separated from other people will lead to exacerbate the feelings of loneliness among people who already were struggling with feeling disconnected and isolated from other people. The association between feelings of loneliness and not mattering to others led Flett and Zangeneh (2020) to suggest that when it comes to the people are highly vulnerable right now, many suffer jointly from profound feelings of being alone and being insignificant and perhaps also feeling overlooked and forgotten. These feelings are likely exacerbated among people who have been marginalized and feel marginalized.

Mattering and the fear of not mattering are clearly distinct when compared with the fear of missing out because mattering is a concept that resonates more broadly with people and it has more potential for being put into action in order to improve people's lives. Unfortunately, while the concept of FoMO clearly resonates most of the time and this is reflected by the burgeoning research literature on FoMO, it does seem less relevant as a public concern at present. People can be enhanced by a feeling of mattering to others in times of crisis either because other people have gone out of their way to show them that they care about them or because they have acted proactively in ways that enhance the well-being of other people. Prilleltensky (2020) made the key observation that mattering is about having value to other people and being able to give value to other people. If viewed from this perspective, acts of physical distancing and social distancing can be framed as having a sense of mattering by showing others that they can count on you to take their health and safety needs into account.

These observations underscore that when considering the similarities and differences between psychological constructs, we must consider what is going on in people's lives and in the culture they live in because personality constructs tend to become more or less relevant and salient as a function of prevailing conditions. Flett and Zangeneh (2020) argued that mattering is highly pertinent right now. The person dominated by FoMO has a fear that is highly central to how they define themselves but the external world does not place a premium on this theme right now as much as it seems to do so in more typical times.

Building the Resilience of People with Interpersonally-Based Fears

We will conclude our analysis with a brief discussion of the need to promote the resilience of people with interpersonally-based fears and worries. The global pandemic translates into a very realistic threat that is being felt around the world. The current times point to the value of having key coping resources and engaging in particular ways of coping in order to minimize risk to self and others and personal levels of anxiety. At a broad level, people will benefit by being highly adaptable so that they can adjust as the current situation unfolds and as they find themselves in situations that

are perhaps unlike anything they have ever experienced. Certain preventive actions are prompted by the fear of contracting the COVID-19 virus (Pakpour & Griffiths, 2020). Clearly, it is also a time that favors task-oriented and problem-focused forms of coping in order to help people navigate the challenges of daily life. Of course, for those people who have been physically isolated and perhaps in quarantine, there is a need to find ways to psychologically distract oneself and avoid the types of rumination and worry that will not only add to distress, they will also undermine immune system functioning.

Unfortunately, there is no leeway at the current time to implement widespread prevention programs. However, when the pandemic has passed and we return to our “new normal” it is vital to have widespread implementation of programs that boost the resilience of people of all ages. Here we must underscore that resilience is essential from the cradle to the grave because our elders most certainly need to be resilient when they start to wonder how much they have mattered. The core focus of such resilience building programs should be enhancing the sense of self-worth that people have so that they are less likely when they in daily life and in crisis situations to have the experience of such fears as the fear of missing out and not keeping up with others, and the fear of not mattering and becoming insignificant and unimportant to others. The strengthening of the core sense of self as a positive entity will have the added benefit of contributing to the sense of optimism and hope that is commonly found among people who are resilient and able to rise above challenges. It is just this blend of resilience, hope, and optimism that is needed more than ever right now.

References

- Ahorsu, D. K., Lin, C-Y., Iman, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The Fear of COVID-19 Scale: Development and initial validation. *International Journal of Mental Health and Addiction*. Advance online publication. doi: 10.1007/s11469-020-00270-8
- Billig, M. (2011). Writing social psychology: Fictional things and unpopulated texts. *British Journal of Social Psychology*, 50(1), 4-20. doi: 10.1111/j.2044-8309.2010.02003.x
- Blackwell, D., Leaman, C., Tramosch, R., Osborne, C., & Liss, M. (2017). Extraversion, neuroticism, attachment style and fear of missing out as predictors of social media use and addiction. *Personality and Individual Differences*, 116, 69–72. doi: 10.1016/j.paid.2017.04.039
- Borkovec, T. D., Metzger, R. L., & Pruzinsky, T. (1986). Anxiety, worry, and the self. In L. M. Hartman & K. R. Blankstein (Eds.), *Advances in the study of communication and affect, Vol. 11. Perception of self in emotional disorder and psychotherapy* (pp. 219–260). New York, NY: Plenum Press.
- Casale, S., Rugai, L., & Fioravanti, G. (2018). Exploring the role of positive metacognitions in explaining the association between the fear of missing out and social media addiction. *Addictive Behaviors*, 85, 83-87. doi: 10.1016/j.addbeh.2018.05.020.
- Elliott, G. C. (2009). *Family matters: The importance of mattering to family in adolescence*. Chichester, West Sussex: Wiley-Blackwell.
- Emmons, R. A., Diener, E., & Larsen, R. J. (1985). Choice of situations and congruence models of interactionism. *Personality and Individual Differences*, 6(6), 693-702. doi: doi.org/10.1016/0191-8869(85)90080-7
- Endler, N. S. (1983). Interactionism: A personality model, but not yet a theory. In M. M. Page (Ed.), *Nebraska symposium on motivation 1982: Personality: Current theory and research* (pp. 155-200). Lincoln, NE: University of Nebraska Press.
- Endler, N. S., & Flett, G. L. (2004). *Endler Multidimensional Anxiety Scales (EMAS)—Social Anxiety Scales (SAS): Manual*. Los Angeles, CA: Western Psychological Services.
- Endler, N. S., Speer, R. L., Johnson, J. M., & Flett, G. L. (2000). Controllability, coping, efficacy, and distress. *European Journal of Personality*, 14, 245-264. doi: 10.1002/1099-0984(200005/06)14%3A3<245%3A%3AAID-PER375>3.0.CO%3B2-G
- Endler, N. S., Speer, R. L., Johnson, J. M., & Flett, G. L. (2001). General self-efficacy and control in relation to anxiety and cognitive performance. *Current Psychology*, 20, 36-52. doi: 10.1007/s12144-001-1002-7
- Erikson, E. H. (1963). *Childhood and society* (2nd ed.). New York, NY: Norton.
- Flett, G. L. (2018a). Resilience to interpersonal stress: Why mattering matters when building the foundation of mentally healthy schools. In A. Leschied, D. H. Saklofske, & G.L. Flett (Eds.), *The handbook of school-based mental health promotion: An evidence informed framework for implementation* (pp. 383-410). New York, NY: Springer.
- Flett, G. L. (2018b). *The psychology of mattering: Understanding the human need to be significant*. Cambridge, MA: Academic Press/Elsevier.
- Flett, G. L., & Blankstein, K. R. (1994). Worry as a component of test anxiety: A multidimensional analysis. In G. C. L. Davey & F. Tallis (Eds.), *Worrying: Perspectives on theory, assessment, and treatment* (pp. 135-181). London, UK: Wiley.
- Flett, G. L., & Zangeneh, M. (2020). Mattering as a vital support for people during the COVID-19 pandemic: The benefits of feeling and knowing that someone cares during times of crisis. *Journal of Concurrent Disorders*. Advance online publication. <https://concurrentdisorders.ca/2020/03/31/mattering-as-a-vital-support-for-people-during-the-covid-19-pandemic/>
- Flett, G. L., Goldstein, A. L., Pechenkov, I. G., Nepon, T., & Wekerle, C. (2016). Antecedents, correlates, and consequences of feeling like you don't matter: Associations with maltreatment, loneliness, social anxiety, and the five-factor model. *Personality and Individual Differences*, 92, 52-56. doi: 10.1016/j.paid.2015.12.014
- Flett, G. L., Sue, C., Ma, L., & Guo, L. (2016). Mattering as a unique resilience factor in Chinese children: A comparative analysis of predictors of depression. *International Journal of Child and Adolescent Resilience*, 4, 91-102. doi:10.1007/s11469-019-00073-6
- Gibbs, K. A., Urbanowski, M. L., & Greenberg, E. P. (2008). Genetic determinants of self-identity and social recognition in bacteria. *Science*, 321(5886), 256-259. doi: 10.1126/science.1160033.
- Horney, K. (1937). *The neurotic personality of our time*. New York, NY: W. W. Norton & Company.
- Lo Coco, G., Salerno, L., Franchina, V., La Tona, A., Di Blasi, M., & Giordano, C. (2020). Examining bi-directionality between Fear of Missing Out and problematic smartphone use. A two-wave panel study among adolescents. *Addictive Behaviors*. Advance online publication. doi: 10.1016/j.addbeh.2020.106360
- Magnusson, D. (1999). Holistic interactionism: A perspective for research on personality development. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and Research* (2nd ed., pp. 219-247). New York, NY: Guilford.
- Manicavasagar, V., Silove, D., & Curtis, J. (1997). Separation anxiety in adulthood: A phenomenological investigation. *Comprehensive Psychiatry*, 38(5), 274-282. doi: 10.1016/s0010-440x(97)90060-2
- Manicavasagar, V., Silove, D., Curtis, J., & Wagner, R. (2000).

- Continuities of separation anxiety from early life into adulthood. *Journal of Anxiety Disorders*, 14(1), 1-18. doi: 10.1016/s0887-6185(99)00029-8
- Maslow, A. H. (1962). *Toward a psychology of being*. New York, NY: Van Nostrand-Reinhold.
- Maslow, A. H. (1971). *The further reaches of human nature*. New York, NY: Viking.
- Murray, H. A. (1938). *Explorations in personality*. New York, NY: Oxford University Press.
- Pakpour A. H., & Griffiths, M. D. (2020). The fear of COVID-19 and its role in preventive behaviors. *Journal of Concurrent Disorders*. Advance online publication. <https://concurrentdisorders.ca/2020/04/03/the-fear-of-covid-19-and-its-role-in-preventive-behaviors/>
- Prilleltensky, I. (2020). Mattering at the intersection of psychology, philosophy, and politics. *American Journal of Community Psychology*, 65(2), 16-34. doi: 10.1002/ajcp.12368
- Przybylski, A., Murayama, K., DeHaan, C., & Gladwell, V. (2013). Motivational, emotional, and behavioral correlates of fear of missing out. *Computers in Human Behavior*, 29(4), 1841-1848. doi: 10.1016/j.chb.2013.02.014
- Riordan, B. C., Flett, J. A. M., Hunter, J. A., Scarf, D., & Conner, T. S. (2015). Fear of missing Out (FoMO): The relationship between FoMO, alcohol use, and alcohol-related consequences in college students. *Annals of Neuroscience and Psychology*, 2, 1-7. doi: 10.7243/2055-3447-2-9
- Rosenberg, M. (1985). Self-concept and psychological well-being in adolescence. In R. L. Leahy (Ed.), *The Development of the Self* (pp. 205-246). Toronto, CA: Academic Press.
- Rosenberg, M., & McCullough, B. C. (1981). Mattering: Inferred significance and mental health among adolescents. *Research in Community and Mental Health*, 2, 163-182.
- Ryan, R. M., & Deci, E. L. (2000). "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being". *American Psychologist*, 55(1), 68-78. doi:10.1037/0003-066X.55.1.68
- Schachter, S. (1959). *The psychology of affiliation: Experimental studies of the sources of gregariousness*. Stanford: Stanford University Press.
- Schlossberg, N. K. (1989). Marginality and mattering: Key issues in building community. *New Directions for Student Services*, 48, 5-15. doi: 10.1002/ss.37119894803
- Scott, H., & Woods, H. C. (2018). Fear of missing out and sleep: Cognitive behavioural factors in adolescents' nighttime social media use. *Journal of Adolescence*, 68, 61-65. doi: 10.1016/j.adolescence.2018.07.009
- Slaney, K. L., & Garcia, D. A. (2015). Constructing psychological objects: The rhetoric of constructs. *Journal of Theoretical and Philosophical Psychology*, 35(4), 244-259. doi: 10.1037/teo0000025
- Taylor, J., & Turner, J. (2001). A longitudinal study of the role and significance of mattering to others for depressive symptoms. *Journal of Health and Social Behavior*, 42(3), 310-325. doi: 10.2307/3090217
- Taylor, J., McFarland, M. J., & Carr, D. C. (2019). Age, perceptions of mattering, and allostatic load. *Journal of Aging and Health*, 31(10), 1830-1849. doi: 10.1177/0898264318795805
- Throuvala, M. A., Griffiths, M. D., Rennoldson, M., & Kuss, D. J. (2019). Motivational processes and dysfunctional mechanisms of social media use among adolescents: A qualitative focus group study. *Computers in Human Behavior*, 93, 164-175. doi: 10.1016/j.chb.2018.12.012