Irrational beliefs predict increased emotional and physical exhaustion in Gaelic football athletes

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Abstract

In a large-scale investigation by the Economic and Social Research Institute, it was revealed that over 51% of Gaelic footballers drop out. Athlete burnout has been associated with increased dropout, but the psychological antecedents to burnout remain under debate. This study implemented a short-term repeated-measures design to assess fluctuations in burnout over time, and the association between changes in burnout and irrational beliefs. Elite Gaelic footballers ($N = 46$) completed a burnout questionnaire at six timepoints across eight weeks in a competitive season, and an irrational beliefs questionnaire at the beginning and end of the eight weeks. In contrast to previous research, burnout did not fluctuate. Irrational beliefs significantly predicted increased emotional and physical exhaustion (one dimension of burnout). This is the first study to show a relationship between irrational beliefs and emotional and physical exhaustion in athletes. The implications of these findings are discussed alongside priorities for future research.

**Keywords:** athlete burnout; irrational beliefs; dropout; emotion; Gaelic football
Irrational beliefs predict increased emotional and physical exhaustion in Gaelic football athletes.

The Economic and Social Research Institute (ESRI) undertook the largest ever study of dropout in Irish adolescents and adults (Lunn, Kelly & Fitzpatrick, 2013), revealing that over 51% of Gaelic footballers dropout, with 17 to 19 year olds at particular risk. This large-scale investigation also highlights some of the potential reasons adolescents are dropping out of sport (e.g., moving house, losing touch with other players, losing interest) but does not address the psychological antecedents of dropout.

The demands on youth athletes have grown significantly in recent times with much more time being spent on training and preparation for performance throughout the competitive season (Gould & Whitley, 2009). In Gaelic games for example, players at Under-16 level may compete for their local club and their county. In some cases athletes may be playing the two codes of Gaelic games; both hurling and football. Furthermore, the removal of an “off-season” from the competitive year in many sports means that one season merges into the next with little respite. With coaches, managers and parents pressurising young and talented players to participate in a large number of training sessions and matches it is not unreasonable to suggest that elite youth Gaelic athletes may suffer from symptoms of burnout, including specifically physical exhaustion in the case of high training loads, and that this may partially explain why Gaelic football has suffered high dropout rates in recent times (Lunn et al., 2013).

Burnout is a significant predictor of athlete dropout (Goodger, Gorely, Lavallee & Harwood, 2007; Gould, Udry, Tuffey, & Loehr, 1996; Robinson & Carron, 1982), and thus an understanding of what can predict burnout in youth Gaelic athletes is potentially valuable. Knowing what psychological factors can increase the risk of burnout may help coaches, parents, and psychologists (as well as policy makers) to identify risk factors and structure
interventions in order to reduce burnout. At a broader level, the identification of
psychological antecedents of burnout may help the Gaelic Athletic Association (GAA) to put
practices in place to curtail the severe fall off in participation among 17 to 19 year old
athletes as revealed in the ESRI report. Therefore, this paper reports a longitudinal study
exploring whether irrational beliefs, a sparsely studied construct within sport psychology, can
predict changes in burnout over a season. Burnout is measured overtime in this study to
understand changes in burnout over the course of a season.

The construct of burnout was first introduced outside of sport in the human services
by Freudenberger (1974), and then by Maslach and Jackson (1984), but a sport specific
conception emerged and evolved through the work of Raedeke (1997) and Raedeke and
Smith (2001). Athletic burnout has been described as “a syndrome of physical/emotional
exhaustion, sport devaluation, and reduced athletic accomplishment” (Raedeke, 1997, p.
398). Physical and emotional exhaustion is associated with intense training and competition
while reduced sense of accomplishment is linked to skills and abilities and the inability to
reach personal goals or perform as expected (Goodger, Lavallee, Gorely, & Harwood, 2010,
Raedeke & Smith, 2009). Sport devaluation reflects cynicism (a negative, callous, or
excessively detached response; Maslach & Leiter, 2000). Importantly, athletic burnout is
considered an experiential state ranging from low to high levels rather than being simply
burned out or not (Raedeke & Smith, 2009). Symptoms of burnout include a loss of interest,
lack of desire to partake in sport, physical and mental exhaustion, lack of caring, and
increased anxiety (Goodger et al., 2010).

Past researchers have not found consistent relationships between training volume and
burnout levels (Gustafsson, Kentta, Hassmen, & Lundqvist, 2007), but there are many
proposed psychological antecedents of burnout, prominently related to self-determination
theory (e.g., Lonsdale, Hodge, & Rose, 2009; Perreault, Gaudreau, Lapointe, & Lacroix,
Apart from factors relating to self-determination theory, a potential antecedent of burnout that has received little attention in sport is irrational beliefs. Research from teaching (Bermejo-Toro & Prieto-Ursúa, 2006; Meehan, 2006) and nursing (e.g., Balevre, 2001; Balevre, Cassells, & Buzaianu, 2012) repeatedly asserts that high irrational beliefs are associated with high burnout. Given that past research has indicated that some athletes are prone to high irrational beliefs (Turner & Barker, 2013), it is reasonable to propose that irrational beliefs may be an important factor in the development of burnout in athletes, just like it is for teachers and nurses.

Irrational beliefs are the main focus of treatment in Rational Emotive Behavior Therapy (REBT), and are therefore an integral part of REBT theory and practice. REBT was developed by Albert Ellis in the 1950s and is considered by many to be the first cognitive-behavioral therapy. High irrational beliefs are consistently associated with unhealthy dysfunctional emotions such as anger and shame, and psychopathological conditions including depression, anxiety, and suicidal thoughts (for a review see Browne, Dowd, & Freeman, 2010), and maladaptive behaviors such as social avoidance, self-harming, procrastination, anger suppression, aggression, and violence (for a review see Szentagotai & Jones, 2010). It is not surprising then, that in educational and health contexts irrational beliefs are associated with burnout, in light of the relationship between irrational beliefs and emotional consequences that are often experienced alongside burnout (e.g., Cresswell & Eklund, 2006; Schaufeli & Buunk, 2003), such as anxiety (Price & Weiss, 2000; Goodger et al., 2007).

Furthermore, for athletes aged between 15 and 16, sport involvement is punctuated with pressure that emerges in part due to an ego-orientated climate perpetuated by coaches, parents, and athletes themselves (Harwood, 2008). A results-orientated climate, where the notion that winning is all that matters is promoted (Harwood, Drew, & Knight, 2010) coupled
with the irrational beliefs sometimes prevalent in athletes (Cockerill, 2002), may lead to athlete burnout. Sparse research expressly focuses on irrational beliefs and burnout, but suggests that higher irrational beliefs are associated with burnout in non-sport contexts (e.g., Meehan, 2006; Balevre et al., 2012). In addition REBT programs that reduce irrational beliefs have also been shown to reduce burnout. For example, in one study (Malkinson, Kushnir, & Weisberg, 1997) REBT was applied with female production workers indicating that after the six-session program burnout was reduced compared to a control group. In addition, at a 12 month follow-up burnout was still reduced from baseline levels. Therefore there appears to be a relationship between irrational beliefs and burnout, but no study is yet to investigate irrational beliefs and burnout in athletes.

In short, amidst the growing drop out rates among Gaelic football athletes (Lunn et al., 2013), burnout has emerged as a potential contributor to athletes withdrawing from Gaelic football. This study investigates burnout in elite Gaelic footballers aged 15 to 16, providing a unique enquiry within Ireland’s most played sport. One potential psychological antecedent that has received recent attention in sport is irrational beliefs (e.g., Turner & Barker, 2013). Although irrational beliefs have been associated with burnout in other contexts such as teaching and nursing (e.g., Meehan, 2006; Balevre et al., 2012), research has yet to investigate the role irrational beliefs may have in the development of burnout in athletes.

Therefore, similar to past research (e.g., Cresswell & Eklund, 2005) the present study adopts a longitudinal approach to understand the relationship between irrational beliefs and burnout. But as an addition to past irrational beliefs research the present study sought to understand the association between irrational beliefs and changes in burnout over time, rather than raw scores at one timepoint.

Based on the extant research, it was hypothesised that irrational beliefs would predict increased burnout over the eight-week period in which data was collected. Specifically, we
expected high irrational beliefs taken at the beginning of the time period to be associated with increased levels of burnout from the start to the end of the time period. That is, we anticipated that high irrational beliefs would predict increases in burnout over time. In addition, athlete burnout was also monitored across the eight-week period within a competitive Gaelic football season to examine changes in burnout over time. Recent research indicates that burnout can remain stable over short periods of time (three months; Madigan, Stoeber, & Passfield, in press) in junior athletes. However, some previous research indicates that athlete burnout may vary over time across short term (three months; Cresswell & Eklund, 2005; Quested & Duda, 2011) and long-term (30 weeks; Cresswell & Eklund, 2006; six months; Isoard, Guillet, & Lemyre, 2012) time periods. Based on the notion that burnout is a syndrome that manifests over time (Quested & Duda, 2011) and past research that indicates longitudinal changes over short periods of time (Cresswell & Eklund, 2005), it was hypothesised that athlete burnout would fluctuate over time, with an increase from the beginning of the time period to the end of the time period. Put simply, we expected burnout to increase over time.

**Method**

**Participants**

Forty-six male adolescent elite county Gaelic football athletes (Mage = 15.62, SD = .53) took part in the study. All athletes were members of an elite Irish development training squad at either Under-15 (N = 25) or Under-16 level (N = 21), and many also competed for a Gaelic Football club (N = 34) based in Ireland. This athlete sample was selected due to their high level of involvement in Gaelic football. Ethical approval was granted and parental and minor consent was given prior to all data collection.

**Measures**

**Athletic Burnout.** The revised Athlete Burnout Questionnaire (ABQ; Raedeke & Smith, 2001) measures three dimensions of athletic burnout; perceived emotional and
physical exhaustion, reduced sense of accomplishment, and sport devaluation (Raedeke, 1997). Each dimension contains 5 items, which are measured on a 5-point Likert scale from 1 (almost never) to 5 (almost always). The ABQ is valid and reliable in youth athletes (reduced accomplishment = .84, emotional and physical exhaustion = .89, sport devaluation = .89) and good test-retest reliability of the scale (reduced accomplishment = .86, emotional and physical exhaustion = .92, sport devaluation = .92) has also been found (Raedeke & Smith, 2001). In the current study, Cronbach’s alpha coefficients indicated internal reliability across all timepoints with a range of .84 to .91.

Irrational beliefs. The Shortened General Attitudes and Beliefs Scale (SGABS; Lindner, Kirkby, Wertheim, & Birch, 1999) consists of 26 items forming 8 subscales. Total irrationality (22 items) is made up of self-depreciation (4 items), other-depreciation (3 items), need for achievement (4 items), need for approval (3 items), need for comfort (4 items), and demand for fairness (4 items). A rationality (4 items) subscale is also included. Athletes were asked to indicate the extent that they agreed with each of the 26 statements on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher scores indicate stronger beliefs. Only the total irrational beliefs variable was used in the current study to ensure sufficient statistical power for appropriate analyses. The SGABS has high test-retest reliability ($r = .91$; Lindner et al., 1999), good criterion, construct, concurrent, convergent, and discriminate reliability (MacInnes, 2003). In the current study, Cronbach’s alpha coefficients indicated internal reliability at timepoint one ($\alpha = .91$) and timepoint six ($\alpha = .87$).

Procedures

Athlete burnout data were collected at six timepoints across the eight-week period between February 2014 and April 2014, and irrational beliefs data were collected at timepoint one and timepoint six. We wanted to collect burnout data as regularly as possible, without
causing the athletes any frustration regarding repeated measurement. Therefore, we felt that the six timepoints across eight-weeks allowed multiple markers of burnout to facilitate meaningful assessment of short-term fluctuation, while ensuring maximum adherence by athletes. In order to collect data, the Team Performance Exchange (TPE, 2014) was used. TPE is a facility which the athletes must access every day on their mobile phones or home computers in order to note any training advice or videos or to complete any questions that the coaches or development officers may have. This offered an ideal method by which to administer regular burnout questionnaires. A link to each questionnaire was created through the use of Qualtrics software (Qualtrics, London, UK), which was posted on each participant’s homepage on TPE so that participants could gain access to the online surveys.

Analytic Strategy

Prior to main analyses, Shapiro Wilks tests were performed. If the presence of significant ($p < .05$) outliers were indicated then z scores for significant outliers were assessed. Data-points with z scores greater than two were removed (two for change in emotional and physical exhaustion, three for change in reduced sense of accomplishment, and four for change in sport devaluation) following guidelines (Smith, 2011). All multicollinearity, homogeneity, normality and outlier checks met the assumptions necessary for all data analyses, apart from sport devaluation at all timepoints. However, change scores were used in subsequent regression analyses therefore the variable was retained. Main analyses followed four steps. First, irrational beliefs at timepoint one were compared to irrational beliefs at timepoint six to assess the stability of irrational beliefs overtime. Second, a repeated-measures MANCOVA was conducted to assess fluctuations in the burnout variables over the six timepoints, with age as the covariate. Third, intraclass correlation coefficients were performed to assess the within-subject stability across the six timepoints for each of the three burnout variables. Finally, to assess the relationship between irrational
beliefs and change in burnout, three multiple hierarchical regression analyses were conducted. A change score for each burnout variable was calculated by subtracting baseline (timepoint 1) scores from timepoint six scores. Baseline (timepoint 1) burnout was included as a covariate so any variance explained by irrational beliefs could be considered alongside baseline levels of burnout, allowing baseline burnout to be accounted for when predicting change in burnout from baseline to timepoint six.

**Results**

**Stability in irrational beliefs**

A paired t-test revealed no difference in irrational beliefs, $t(45) = .33, p > .05$, from timepoint one ($M = 56.60, SD = 12.12$) to timepoint six ($M = 56.04, SD = 10.82$). Therefore, irrational beliefs remained stable over time ($M_{\text{Change}} = .54, SD = 11.24$).

**Changes in burnout over time**

A repeated-measures MANCOVA revealed a significant main effect of time, Wilks Lambda = .84, $F(3,15) = 2.12, p < .01$. Follow-up univariate analyses revealed a significant effect of time for emotional and physical exhaustion, $F(5,190) = 4.17, p < .001$. Post Hoc Bonferroni analyses showed that timepoint two ($M = 2.21, SD = .64$) was significantly ($M = .42; SD = .46; p < .001$) higher than timepoint four ($M = 1.82, SD = .60$) and significantly higher ($M = .40; SD = .46; p < .001$) than timepoint five ($M = 1.83, SD = .60$). There were no further significant differences. Intraclass correlation coefficients revealed that within-subject emotional and physical exhaustion scores were stable, $F(43,215) = 11.68, p < .001$, across time, ICC = .91, 95% Confidence Interval from .87 to .95. Univariate analyses did not reveal a significant effect of time for reduced sense of accomplishment, $F(5,190) = .20, p > .05$. Intraclass correlation coefficients revealed that within-subject reduced sense of accomplishment scores were stable, $F(43,215) = 11.47, p < .001$, across time, ICC = .91, 95% Confidence Interval from .87 to .95. In addition, univariate analyses did not reveal a
significant effect of time for sport devaluation, $F(5,190) = 2.28, p > .05$. Intraclass correlation coefficients revealed that within-subject sport devaluation scores were stable, $F(43,215) = 16.57, p < .001$, across time, ICC = .94, 95% Confidence Interval from .91 to .96.

**Irrational beliefs and burnout**

To examine the relationships between irrational beliefs and changes in the three burnout variables, three separate hierarchical multiple regression analyses were carried out, with change in burnout (change in emotional and physical exhaustion, change in reduced sense of accomplishment, or change in sport devaluation) as the outcome variable (controlling for participant age and baseline burnout) predicted by irrational beliefs measured at timepoint one. Participant age was included in step 1, and baseline burnout (emotional and physical exhaustion, reduced sense of accomplishment, or sport devaluation) was included in step 2 to account for the potential influence of baseline levels in predicting change in burnout in the regression analyses, and irrational beliefs was included in step 3.

**Emotional and physical exhaustion.** In step 1, age accounted for a significant proportion of variance, $R^2 = .17, p = < .01$ ($\hat{b} = -.30, p < .04$). In step 2, baseline burnout did not account for a significant proportion of variance, $R^2_{\text{Change}} = .07, p > .05$. In step 3, irrational beliefs accounted for a significant proportion of variance, $R^2_{\text{Change}} = .11, p < .02$. Higher irrational beliefs were significantly associated with larger increases in emotional and physical exhaustion ($b = .20, \hat{b} = .35$).

**Reduced sense of accomplishment.** In step 1, age did not account for a significant proportion of variance, $R^2 = .02, p = > .05$. In step 2, baseline burnout accounted for a significant proportion of variance, $R^2_{\text{Change}} = .23, p < .01$ ($\hat{b} = -.48, p < .01$). In step 3, irrational beliefs did not account for a significant proportion of variance, $R^2_{\text{Change}} = .03, p > .05$. 
Running Header: IRRATIONAL BELIEFS PREDICT EXHAUSTION

1. **Sport devaluation.** In step 1, age did not account for a significant proportion of variance, $R^2 = .03$, $p > .05$. In step 2, baseline burnout did not account for a significant proportion of variance, $R^2_{\text{Change}} = .01$, $p > .05$. In step 3, irrational beliefs did not account for a significant proportion of variance, $R^2_{\text{Change}} = .01$, $p > .05$.

In sum, data analyses indicate that irrational beliefs remained stable over time, and that irrational beliefs at baseline were able to predict increases in emotional and physical exhaustion from baseline to timepoint six. Analyses also showed that there was little fluctuation in burnout overtime, with the exception of decreases at timepoint four and five, returning to baseline levels at timepoint six.

2. **Discussion**

Based on research from non-sport contexts (e.g., Meehan, 2006; Balevre et al., 2012), it was hypothesised that irrational beliefs would predict increases in burnout from baseline to timepoint six. Results partially supported this hypothesis as high irrational beliefs at baseline were related to increased emotional and physical exhaustion (a dimension of burnout) at timepoint six from base levels. Indeed, irrational beliefs accounted for 11% of variance in the regression analysis, which is considered to be a large proportion (Cohen, 1992). Importantly, it was the change in burnout from baseline levels that was used in the current study, rather than burnout levels at one time point, allowing the assessment of irrational beliefs in relation to increases in burnout. Inferentially, data revealed that there was little fluctuation in burnout over time at a group level (MANOVA) and within-subjects level (intraclass correlations), although some variation can be seen in the Mean levels. Despite the absence of group-level and individual-level variation in the inferential analyses, the significant findings of the regression analyses for emotional and physical exhaustion suggest some variation within individuals, which was systematically related to variation in irrational belief scores within the group. Indeed, results indicating that irrational beliefs can predict increases in emotional and
physical exhaustion suggest that those high in irrational beliefs are at particular risk of
experiencing increased symptoms of emotional exhaustion across a short time span.

It was expected that burnout would fluctuate over the eight-week period, and
specifically we expected burnout to increase over time. Contrary to our hypotheses,
inferentially burnout did not fluctuate or increase over time and is in line with some previous
research (e.g., Madigan et al., in press). Emotional and physical exhaustion significantly
decreased at timepoint four and five from timepoint two, although scores returned to baseline
levels at timepoint six, suggesting that burnout varied very little over time in contrast with
past research (e.g., Cresswell & Eklund, 2005). Some variation is apparent on visual
inspection of the Means, and this variation was predicted by irrational beliefs in the
regression analyses, but in essence burnout was stable over time apart from at two timepoints
for one dimension of burnout (emotional and physical exhaustion).

Within the regression analyses, an additional finding emerged that may further
explain the development of emotional and physical exhaustion in Gaelic football athletes.
Increases in emotional and physical exhaustion were more prevalent in younger athletes,
suggesting that younger athletes are more at risk with regards to emotional and physical
exhaustion, potentially owing to the range of factors outlined in the report by Lunn et al.
(2013) such as participating in exams at school that lead to athlete drop out. Although age
was not related to irrational beliefs in this study, past research indicates that higher irrational
beliefs tend to be more prevalent in younger adolescents (e.g., Ndika, Olagbaiye, & Agiobu-
Kemmer, 2012). Therefore, younger adolescents with high irrational beliefs may be at
particular risk of experiencing burnout and dropping out of Gaelic football participation.

This is the first study to relate irrational beliefs to burnout in athletes, but the finding
that irrational beliefs were able to predict increases in emotional and physical exhaustion
supports previous research from health and education domains (e.g., Meehan, 2006; Balevre
et al., 2012). This study does not contain data that could illuminate why irrational beliefs were able to predict increased emotional and physical exhaustion, but it is possible to draw on past research and REBT theory to understand the connection in more detail. REBT can be regarded a motivational theory (David, 2003) akin to the cognitive appraisals paradigm asserted by Lazarus (1991). Irrational and rational beliefs represent specific types of hot cognition (e.g., Ableson & Rosenberg, 1958) or primary appraisal (Lazarus, 1991) that are strongly involved in the generation of emotion. In effect, irrational and rational beliefs are ways of appraising (hot cognition) particular representations of reality (cold cognitions) in terms of their personal significance to the individual (goal or motivational relevance; David, Lynn, & Ellis, 2010; Hyland & Boduszek, 2012). Therefore, because irrational beliefs generate dysfunctional emotions in goal relevant situations, it is perhaps unsurprising that in sport irrational beliefs can lead to emotional and physical exhaustion in athletes, given that sport is highly goal relevant for athletes. If irrational beliefs remain high, such as in the present study, dysfunctional emotions may occur frequently thus contributing to emotional exhaustion over time. Irrational beliefs left unchecked can lead to various psychological and behavioural dysfunctions (e.g., Browne et al., 2010; Szentagotai & Jones, 2010), and on the evidence of this paper and past research (e.g., Balevre et al., 2012), may contribute to burnout. But the presence of irrational beliefs can be managed through the structured application of REBT, which involves facilitating individuals and teams through a process whereby irrational beliefs are first recognised and then systematically disputed (Ellis & Dryden, 1997; Turner & Barker, 2014). Then, rational beliefs are promoted, thus encouraging more healthier and adaptive emotions and behaviours (Dryden, 2009). The results of this study and past research (e.g., Ndika et al., 2012) suggest that athletes should be educated in the principles of REBT at an early stage in their careers in order to reduce likelihood of burnout and to enhance sport
adherence. This may involve educational approaches or one to one support at key stages in
the adolescents’ athletic development. It should also be recognised that irrational beliefs can
be socialised into athletes by significant others such as parents, coaches, and teammates
(Ellis, 1976). Therefore, the principles of REBT can be applied to significant others to help
them to remove the portrayal of irrational philosophies through language such as “you must
win” or “today’s performance was terrible”, for example. The impact of significant others on
the thoughts and emotions of children has long since been recognised (e.g., Fredricks &
Eccles, 2004), and therefore could be a major factor in the development, and indeed the
discouragement, of irrational beliefs in young athletes.

In this study inferential statistics indicated that, in contrast to past research (Cresswell
& Eklund, 2005), burnout did not fluctuated over time. Across the data collection period
there is a decrease in emotional and physical exhaustion at timepoints 4 and 5 from timepoint
two, with an increase back to baseline in the final time point. It is difficult to explain this rise
and fall in emotional and physical exhaustion without specific contextual information about
the athletes. Further, it is not known how prevalent burnout was at the start of the season and
how this had already changed at baseline. That is, it is now known what led to the burnout
levels reported at baseline. It could be that certain parts of the season are heavier in terms of
training load and competition frequency, as is common in many sports including Gaelic
football. These limitations may partially explain the lack of fluctuation in burnout found in
the present paper. However, the finding that emotional and physical exhaustion was higher
for some part of the data collection period and lower in others may encourage psychologists
to ensure that at these key periods of time, sufficient and structured support is given to the
athletes, whether this is in the form of REBT or other interventions that have been shown to
reduce burnout (e.g., see Awa, Plaumann, & Walter, 2010, for a review).
Based on the report by the ESRI (Lunn et al., 2013) that revealed 51% of Gaelic footballers drop out, in this study we set out to investigate possible psychological reasons that young athletes might be dropping out of Gaelic football. Burnout is one potential reason for dropout in this population of athletes (Taskforce on Player Burnout, 2007), and irrational beliefs may be an important determinant of burnout in athletes. But there are a range of factors that determines dropout, not just psychological aspects, such as moving house, losing touch with other players, losing interest in the sport, and undertaking school exams. Indeed, athletes may experience burnout but remain in the sport due to financial or parental pressures. In this paper a potential psychological explanation for increased emotional and physical exhaustion is offered but it is important that a holistic approach is taken for future research that considers the many sport and life factors that contribute to dropout. Future researchers should also investigate how specific irrational beliefs (e.g., demands, awfulizing, low-frustration tolerance, and self-depreciation) may determine burnout accumulatively and differentially. It may be that certain beliefs are associated with burnout more strongly than others. Future researchers should also examine longitudinal changes in burnout similar to past research to ascertain how and importantly why burnout fluctuates over time as also evidenced in the current paper. For example, Quested and Duda (2011) burnout was measured over a 12-week period alongside basic psychological needs constructs, indicating that lower-levels of basic psychological needs was related to increased burnout over time. Similarly adopting a self-determination theory approach, Isoard et al. (2012) found that lower intrinsic motivation and higher amotivation was related to increased reduced sense of accomplishment over time in student athletes. More recently, Madigan et al. (in press) showed that higher perfectionistic concerns (considered maladaptive) predicted increased burnout over a three-month period in junior athletes. Irrational beliefs about perfectionism (i.e., I must be perfect) are thought to contribute to dysfunctional anxiety and depression (Ellis, 2002), and therefore researchers...
should examine the interactive effects of irrational beliefs perfectionism and irrational beliefs in relation to burnout over time.

In conclusion, this study adds to the extant literature (e.g., Balevre et al., 2012) indicating a relationship between irrational beliefs and increased emotional and physical exhaustion (a dimension of burnout). That is, higher irrational beliefs are related to larger increases in emotional and physical exhaustion. The study did not fully support past research suggesting that burnout fluctuates over time (e.g., Cresswell & Eklund, 2005) although some variation can be seen in the Mean levels, as burnout remained stable, with the exception of emotional exhaustion at two timepoints. These findings do however support some recent research indicating that burnout can remain stable over a short period of time in athletes (e.g., Madigan et al., in press). This is the first study to investigate the association between irrational beliefs and burnout in athletes, and we were able to do so in a unique sample of athletes that are under-researched in sport psychology literature. We aimed to investigate one potential psychological factor, namely irrational beliefs, that could contribute to high dropout rates in Gaelic football athletes by using REBT as a theoretical framework. Researcher should explore specific irrational beliefs in relation to burnout, and collect data over a longer period of time than in the current paper. In light of the findings, it is recommended that Gaelic football athletes at ages 15-16 are screened for irrational beliefs at the start of a competitive season, and those scoring highly are introduced to and educated in REBT.

References


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