

HISTORY OF PSYCHOLOGY COURSES' INFLUENCE ON STUDENTS' PERSONAL  
EPISTEMOLOGIES

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### **Abstract**

This paper explored: a) how the history of psychology course influences students' personal epistemologies and b) if, and how, this alters students' perceptions of psychological knowledge or the discipline more broadly. Students' ways of knowing, their experience in the history of psychology course, and their attitudes and outlook towards psychology were collected by open-ended interviews with students and qualitatively analyzed for themes. Although the research was intended to be exploratory rather than confirmatory, the findings were largely in accordance with the empirical and theoretical bodies of work on personal epistemology and the history of psychology. The results suggested that a development in students' ways of knowing and a broadening in students' conceptualizations about psychological knowledge and institutional psychology took place following their completion of the course. The results contribute to the existing personal epistemology literature which is always engaged with the role and outcome of education on students' beliefs about knowledge and knowing. Furthermore, this research will also add to the discourse regarding the history of psychology course's position within academic psychology, and the importance of teaching history critically.

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## **Introduction**

Understanding how psychological knowledge and thought become assimilated and accommodated within students' personal epistemologies is one of the core goals of educational psychology (Lahtinen & Pehkonen, 2013). This aids in understanding not only the best teaching practices and delivery methods, but also informs educators on how students make sense of their experiences and engage with the world with their newly diversified ways of knowing and thinking.

Educational psychologists have emphasized the importance of both students' and educators' personal epistemologies for learning and teaching, across various settings and age groups (Hofer & Bendixen, 2012). Researchers typically operationalize personal epistemology in terms of epistemological development or systems of beliefs, although there is little consensus regarding these processes or models. Nonetheless, the branch of personal epistemology research signifies that while growing students' body of knowledge and developing students' skills is fundamental to pedagogy, expanding students' philosophical beliefs and values is equally informative and vital for development and learning (Hofer & Bendixen, 2012).

Various elements related to personal epistemology have been previously studied including what gives rise to, or sets the foundation for, epistemological development, as well as the impact of developing epistemologies on learning and beyond (Bendixen & Rule, 2004). By nature, educators are in a position designed to guide students' epistemological beliefs by broadening how students view, think, and interact with knowledge. Some ways research has demonstrated that epistemological development can be initiated is by fostering active engagement during the learning process (Lahtinen & Pehkonen, 2013) and encouraging self-reflections about one's beliefs (Baxter-Magolda, 2004). Therefore, courses and material that has

already ingrained these practices into their curriculum should contribute to greater epistemological development.

Previous work from a variety of fields has proposed that the history of psychology exemplifies this method of teaching and learning (e.g., Rutherford & Pickren, 2013; Danziger, 1994). The impact of learning about the history of psychology, or history in general, on students' beliefs about knowledge has been a topic of fluctuating controversy for many decades (Danziger, 1994; Brush, 1974). Due to its evocative material and contemplative nature, it has been argued that some history of psychology course provides an optimal environment for advancing psychology students' epistemic development (Perry, 1970). Learning about the philosophical (i.e., ontological, epistemological, and ethical) underpinnings of psychological knowledge and research, structural power dynamics in academia and society, and the movements within and beyond psychology that shaped our present understanding and practices can generate doubt in one's epistemological beliefs.

### **Personal Epistemology/Ways of Knowing**

Epistemology, which refers to the nature or theory of knowledge, has been of long-standing interest to philosophers (Walsh et al., 2014). In more recent decades, psychologists have become concerned with personal epistemology (PE), which is described as beliefs about what knowledge is, where knowledge comes from and how we can be certain about what ourselves and others know (Hofer & Bendixen, 2012). In addition to epistemological thinking, research in this field has emphasized the role of epistemic change and development for learning and education in both children and adults (Bendixen & Rule, 2004; King & Kitchener, 1994).

The origin of PE is often associated with research published in 1970 by education psychologist William Perry, who conducted a longitudinal study on male Harvard students.

Although moral and intellectual development had been of interest to scholars prior, Perry's (1970) contribution spurred a new area of research in personal epistemology with most of the work in this area interpreting, applying, and expanding his original nine-stage developmental scheme (Tafreshi et al., 2018).

The first position in Perry's epistemological stages was called *Basic Duality* which he used to refer to a knower who thought in non-gradable, dual terms of black and white. This epistemological position is also commonly referred to as either/or thinking, resulting when individuals have a strong sense of right and wrong, with little room for gray areas, nuance, or neutrality. Commonly alongside dualism is absolutist thinking, which refers to the belief that there are absolute and definitive truths that exist independently from the knower. In this position, knowledge is viewed as a kind of informational object that can become known or 'possessed' by being passed on from someone, often an authority figure, without consideration of interpretive efforts or impacts.

The second position in Perry's (1970) epistemological scheme was conceptualized as a late form of the dualism described in the first position whereby the individual may start to embrace multiple perspectives while still regarding authority figures as the adjudicators of absolute knowledge and truth. These students become more welcoming of differences and contradictions in ways of knowing while still limiting the amount of uncertainty and complexity they can handle.

In the third position, known as *Early Multiplicity*, the knower begins to disassociate absolute knowledge from the authority (Perry, 1970). The authority shifts to a source of learning rather than a source of information; the authority provides the knower with the correct ways to discover knowledge. While most knowledge is seen as knowable at this stage, skepticism about

the certainty of all knowledge begins to creep in. For example, disagreements between and inconsistencies within experts and authorities plays a key role at this stage. Furthermore, learning about or enduring disciplinary paradigm shifts, perhaps as a result of novel findings that challenge pre-existing frameworks, can also contribute to epistemic doubt.

In *Late Multiplicity* which occupies the fourth position (Perry, 1970), the students have fully come into their multiplicitous views by ditching the right-or-wrong dichotomy. At this stage, the knower recognizes diversity in knowledge and opinions; however, the knower accepts all views, including their own, as equal and legitimate. They begin to realize that some knowledge, particularly from specific domains, contains ambiguity and complexity, while viewing other domains as still in the realm of knowability.

While the instructor is maintained as an important source similar to in Position 3, the learner's recognition of expert's conflicts and contradictions generates more uncertainty towards absolute knowledge and weakens their trust in authoritative knowledge. Here, the student shifts focus onto the processes involved in knowing and starts to see the authority as knowing the methods required for finding knowledge, even if the authorities themselves do not have the answers. While the knower emphasizes the importance of independent thinking, the student is still invested in thinking like the authority in response to the authority's expectations. As a result, the knower's responsibility to knowledge becomes detached and justifications of knowledge come from that which they believe is supported by evidence.

The next position in Perry's (1970) scheme is *Contextual Relativism*, where the student now views all, not just some, knowledge as contextual and has abandoned their beliefs about absolute truth. Up until this point, the knower has endured a Piagetian form of knowledge accommodation and assimilation, but is now in the process of a personal paradigm shift à la

Kuhn. Perry (1970) stated that the adoption of contextual relativism is a form of habituation since the student no longer ascribes to a multiplistic view where they use relativism as one of multiple frames of reference but instead replace it entirely as their own personal epistemology. The knower at this stage judges the sufficiency of knowledge based on the context and the expert knowledge available in that context. The authority position is attributed to those with expertise in a given area and the role of the authority is to provide the learner with the procedural tools and contextual rules to make adequate knowledge judgements.

The final four positions in Perry's (1970) scheme are variants of relativism based on their degrees of commitment, which he refers to as "an act, or ongoing activity relating to a person as agent and chooser to aspects of his life in which he invests his energies, his care, and his identity" (pp.149-150). Perry's (1970) work has been adapted and oftentimes simplified. This typically results in a reduction of stages to as few as two (e.g., Ryan, 1984; Kuhn, 1991). Nonetheless, research on personal epistemology usually includes the main themes of dualism, multiplism, and relativism. Much research in recent years, however, relies on Perry's work as more of a grounding and historical tool, while drawing from other literature on personal epistemology or related topics (e.g., Lahtinen & Pehkonen, 2013).

Another seminal work that came from this movement was by Belenky et al. (1986), who developed a system of five epistemological perspectives based on qualitative interviews with 135 women of all ages and socioeconomic backgrounds. Similar to personal epistemology, a lot of research adopted Belenky et al.'s (1986) model in lieu of Perry's (1970) scheme in order to understand women's personal epistemologies. Belenky et al.'s (1986) research was created, and included in this study, to complement rather than contradict Perry's (1970) study by providing women's epistemological orientations. The current study drew from both Perry's (1970) and

Belenky et al.'s (1986) conceptualizations of personal epistemology and epistemological development.

### *Silenced knowers*

According to Belenky et al. (1986), silenced knowing is considered the rarest way of knowing in women, even more so in socially or educationally advantaged women. Silenced knowers express feelings and experiences that position themselves – or more seemingly, their past selves – as being voiceless or unable to speak up. This silence may stem from feelings that one cannot connect with, and therefore understand others, in order to gain knowledge through listening and dialogue. Silenced knowers are unable to recognize the power of language in knowledge transmission. They also often lack introspective abilities and self-awareness towards their own past experiences and predilections, making it difficult for these women to draw on these as a way of knowing. Lastly, silenced knowing often manifests as a submissiveness and powerlessness to authority.

### *Received knowers*

Received knowing is marked by learning through listening and positions listening as a primary way of knowing. Knowledge to those who occupy this category is understood as transferable from one knower to another, without consideration of interpretation. While learning may come from experience for the received knower, most knowledge comes from the experiences and insights of others, particularly figures of authority or expertise. Received knowers see themselves as “[b]eing recipients but not sources of knowledge” (p. 40, Belenky et al., 1986). Received knowers are the most likely to enact absolutist and dualist thinking by arguing that received knowledge that aligns with their pre-existing views will be deemed more correct than when it contradicts them. In other words, these individuals dichotomize between we

and other, the right and wrong, and the authority and illegitimate (Belenky et al., 1986; Perry, 1970). Furthermore, received knowers associate listening with morality because they view legitimacy and factualness as exclusively awarded to women who listen and gain moral knowledge from ‘outside’ themselves. The inability to gain knowledge from within is not limited to moral or general knowledge for the received knower, however; but also encompasses self-knowledge. As a consequence, these kinds of knowers are likely to act in accordance with others’ images of themselves, even in cases where they may be wary or unconvinced of these depictions of themselves. In addition, these women provide self-descriptions in terms of their social or occupational roles (e.g., mother, nurse), further defining these roles – and thus themselves – based on their normative expectations.

### *Subjective Knowers*

The subjective knower departs from the silenced and received knower by shifting the locale of knowledge and truth to within themselves rather than coming from the world outside (Belenky et al., 1986). Subjective knowing makes individuals far less likely to passionately appeal to authority or conceptualize knowledge as strictly right or wrong. Subjective knowing describes women who are autonomous in their decision making and open to interpretive differences. These women are less bound by sociocultural expectations and customs, particularly with regards to the meaning of womanhood; self-defining in terms beyond their social or familial relations. While these women may position subjective knowledge as being more enlightening, they may still hold an absolutist and dichotomous view of knowledge whereby the source of ‘true’ knowledge comes from within rather than from others. The subjectivist way of knowing is also aligned with the many folktales and myths about the nature of women’s knowledge as intuitive and intimate to the knower. According to Belenky et al. (1986), the shift from received

knowing to subjective knowing is different than Perry's transition from dualism to other stages because of the specific consequences for subjectivist women in patriarchal and empirical societies. The subjectivist shift for the women in Belenky et al.'s (1986) original study typically occurred after these women experienced a loss of trust in authority figures for a number of reasons, leading them to a faith in themselves and their own abilities. This can include, but is not limited to, experiences of feeling misheard, misrepresented, or misunderstood by an authority figure, sometimes resulting in conflict or harm to the individual. Abuse and medical misdiagnoses are two examples of experiences that could contribute to subjective knowing.

The subjective knower demographic includes women of all ages and backgrounds, and accounted for over half of the 135 participants interviewed. Most of these women were disadvantaged at one or more points in their life leading them to a subjectivist way of knowing through personal challenges and life changes. As subjective knowers question the certainty and protection previously associated with authorities, they shift towards and rely on the subjective voice instead.

### *Procedural knowing*

Procedural knowing, also referred to as 'the voice of reason' by Belenky et al. (1986), blends together authoritarian facts with women's subjectivist voices in order to create a complex epistemology of reasoning between the two that tends more toward multiplism than dualism. For procedural knowers, there is no absolute truth; instead, certain truths and knowledge may be considered more acceptable under certain circumstances or by certain individuals. The procedural knower views knowledge as rarely hard and fast but something that requires reflection and conscious analysis. These women are capable of respecting and obeying authority, but without abandoning their own knowledge or feelings. They understand that authority, under

particular circumstances and with benign intentions, require obedience in order to accomplish a goal or keep the peace, even if it diverges from their own views. Many procedural knowers have mastered perspective taking and acknowledge that looking at a problem from others' subjective point of view is paramount to knowing. From these viewpoints, the procedural knower is more concerned with the processes or methods that bring individuals to their knowledge or opinions more so than what their knowledge or opinions actually are. While these women would never give up or silence their subjective voice, they are more likely to look to the external, 'objective' world for answers to problems than to solely depend on their internal voice, although this approach is usually learned (particularly through academia) rather than innate. In this sense, procedural knowers see the world as it is rather than how they want or think it should be.

In addition to the five categories of women's ways of knowing constructed by Belenky et al. (1986), the authors also subcategorized procedural knowing into separate and connected knowing. In connected knowing, there is a "theme of understanding" (p. 100) that fosters an unprejudiced and balanced approach to alternative perspectives and knowledge, and neglects evaluative or comparative processes. The separate knower is ruled by a "theme of knowledge" (p. 100) whereby perspective taking, particularly towards a detached authority, is utilized in order to reiterate or construct an argument that suffices 'objective' standards. In fact, the separate knower may vehemently disagree with the authority but ascribes to their rules in order to win or succeed. Given a dilemmic situation, the separate knower seeks to take the position of authority or objectivity to gain approval or accomplish a goal; as means to an end. The connected knower also seeks to take the position of the authority or the other, but instead with the intention of sympathetic understanding; to see and make sense of knowledge and experiences as others do.

The procedural knowers are the most homogenous group and are constituted almost entirely of young, educated white women who have rarely experienced the hardships of women in the previously mentioned groups. However, Belenky et al. (1986) noted that there are different implications for women than men who ascribe to dominant knowledge standards that reflect hegemonic views given that women do not dominate this group and it may not reflect their experiences or knowledge.

### *Constructed knowing*

In constructed knowing, the knower has come to recognize their personal role in the construction of knowledge. The knower views knowledge as constructed and acknowledges that there are limits and power to their interpretation of, and contribution to, knowledge. These women are masters at integrating the voices of others or authorities as well as the many voices of the self into complex, but cohesive ways of knowing. Constructivist knowers accept the mutability of truth and knowledge, both between people and within themselves, across time and places. Constructivist knowing involves the integration of thoughts and feelings; the knower cannot separate themselves from the known. Women constructivists espouse that there is no right or wrong way of knowing but do reflect upon the nuance, ambiguity, and contradiction in knowing. Because these women integrate the self into their knowledge and ways of knowing, they have more self-awareness that contributes to a patience and passion for knowledge. The constructivist knower is critical and interrogative of questions and answers. While they may accept the authority's word, they will also decide the reputability and trustfulness of an authority based on their own personal qualitative standards. This kind of questioning is part of a moral responsibility and care towards all parties involved in a dilemma, and ensuring a fair, rather than theoretical, justice for all.

In addition to the progressive stages of epistemological development put forth by Perry (1970), Belenky and colleagues (1986), and numerous subsequent researchers, other scholars demonstrated that there are different ways of knowing from which diverse kinds of knowers have emerged resulting in alternative conceptualizations of PE as a phenomenon that differs between individuals in addition to within individuals (Schommer, 1990; Hofer & Bendixen, 2012). For example, a frequent inquiry in personal epistemology literature pertains to the stability of a knower's personal epistemologies across disciplines (Muis et al., 2006). Research in this area has proposed that various aspects of knowledge and knowing (e.g., structure, certainty, sources, and justifications) are likely to be discipline-specific as opposed to general across all domains. In other words, an individual may have different epistemological stances for mathematics, history, science, art, and so on (Muis et al., 2016; Hofer & Bendixen, 2012).

The processes of change and development in an individual's ways of knowing maintain a crucial, yet underexplored area of inquiry in PE research (Bendixen & Rule, 2004). Although there are various models dedicated to changes in PE (e.g., King & Kitchener, 1994; Kuhn, 1991), there is no united model or map to describe how epistemological beliefs develop or evolve (Hofer & Bendixen, 2012). Instead, the literature has often favoured integrative approaches to epistemic development that utilize multiple particular models, as most accounts of epistemological acquisition and development derive from the Piagetian concept of equilibration (Hofer & Bendixen, 2012). This is likely due to the popularity and influence of Jean Piaget's work in cognitive development at this time. These models typically follow a similar developmental pathway which includes an underlying mechanism or stage of disequilibrium, dissonance, or doubt as the starting point within a hierarchical cognitive development model. Most models posit that the knower matures from a position or perspective of dualism and

absolutism to one of relativism and constructivism. In other words, individuals begin their epistemic development from a perspective of knowledge as separate from the knower and capable of being passed down from authoritative figures and expert knowers. The final stages of development are reached when a knower recognizes, evaluates, and *commits* to a more pluralistic way of knowing that incorporates the knower as an active participant in knowledge interpretation and generation (Hofer & Bendixen, 2012). Understanding the experiences that give rise to epistemic fluidity and changes across time and space is a core focus of PE research, but more research is required to understand these developments.

PE research and theory draws from interdisciplinary perspectives but predominantly stems from a cognitive tradition, hence the synonymous term *epistemic cognition* (King & Kitchener, 1994). Despite the extensive body of literature on PE that has accumulated from several decades of investigation, there is little consistency on the definition or classifications of PE which has led to conceptual and methodological critiques. PE is customarily operationalized as cognitive mechanisms such as beliefs, theories, or resources that exist as internal mental states or stable dispositions (Hofer, 2002; Tafreshi & Racine, 2015). A minority of PE research has attempted to incorporate contextual and cultural factors into their models (e.g., Louca et al., 2004) or have addressed historical and linguistic aspects of knowing (Maynard & Barney, 2019). However, most theories rely on internalized and psychologized conceptions of PE, despite acknowledging sociohistorical aspects of knowledge and recognizing knowledge as constructed by the knower. Furthermore, research on PE has often relied on quantitative measures aimed at making aggregate level claims about knowledge beliefs. These approaches to PE research have ontological and operational consequences that can lead to the erasure or minimization of situational and contextual factors that likely influence on individual's beliefs about knowledge.

The field of PE has evolved throughout the last five decades to accommodate several of these criticisms, but still rely on many of the same underlying philosophical principles. In more recent years, some research (e.g., Tafreshi et al., 2018; Lahtinen & Pehkonen, 2013) has addressed certain methodological criticisms by returning to qualitative approaches for studying PE. Some literature on PE (e.g., Tafreshi & Racine, 2015) recommended future research should include more contextualized and individualized studies of epistemological thought and development to account for the subjective and interpretative nature of knowledge beliefs, which is what the present study aimed to capture. In addition, Tafreshi et al. (2018) adopted a description of PE as being situated in, and restrained by sociocultural contexts. This conceptualization of PE as dynamic and complex, as opposed to stable and independent implies a form of PE that can be instantiated differently across time and settings that may or may not reflect ‘underlying’ beliefs about knowledge (Hacker, 2004). The use of these approaches not only disrupts the methodological practices in PE research, but also transforms the foundational principles of the ontology of PE, which may be required if PE literature hopes to continue to adapt alongside post-structuralist and constructionist movements in the discipline.

Many of these critiques, in addition to alternative concepts for PE from extra- and interdisciplinary approaches have been used to inform the conceptualization of PE in the current study. Ways of knowing, although not unknown to psychology, often draws from an epistemological standpoint distinct from positivist and reductionist traditions in psychology, resulting in different definitions and criteria than the construct personal epistemology encompasses (Levac et al., 2018). For example, ways of knowing has increasingly been used to describe non-Westernized systems of knowledge (e.g., Indigenous; African ways of knowing) and, in drawing from these knowledge systems, emphasizes relational, experiential, and

ecological knowledge over logical knowledge and objective truths in constructing personal epistemologies (Levac et al., 2018; Ngara, 2007; Peloquin & Berkes; 2009). Furthermore, literature on ways of knowing usually prioritizes historically oppressed groups as opposed to PE researcher's focus on the effects of education on knowledge beliefs. Themes of spirituality, intuition, survival, tradition, and liberation are common across this area of inquiry. Furthermore, ways of knowing, or similarly methods of knowing, grammatically positions knowing as a practice and knowledge as actionable, unlike personal epistemology which is typically objectified via nominalization and operationalization, particularly when described as beliefs about knowledge (Hacker, 2004; Billig, 2011; Rogers, 1989). While PE research has remained predominantly the domain of psychology and pedagogy, ways of knowing has been utilized across numerous areas and studies. As a result, however, the body of literature on ways of knowing is vastly diverse in approaches, theories, and applications.

Lastly, there is the concept of autoepistemology which refers to the first-person formation of an epistemological theory about ones' own subjective opinion (Teo, 2023). This theoretical conceptualization reflects 'my' psychological, somatic, and personal world as being entangled with 'my' relational, social, and historical background. These theories of knowledge broadly and PE specifically engender a more extensive and complex perspective that pushes beyond the boundaries of cognitive psychology.

While understanding blanket personal epistemologies has been one of the central aims of PE research, other approaches to PE propose that individuals also hold discipline-specific beliefs about knowledge (Hofer, 2002). Research in this area has explored the relationship between the epistemological framework associated with specific disciplines (e.g., science, math) and an individuals' general PE. Some researchers argue that the philosophical foundations of a

discipline shapes students' beliefs about that field and its claims to knowledge. This domain-general and discipline-specific debate about PE is logically related to the disciplining of education and curricula and the current research project.

In the case of psychology, the dominant epistemological paradigm in modern, Western society is argued to be positivism, and is countered by postpositivist, critical-ideological, and constructivist-interpretivist positions, to name a few (Allwood, 2012; Ponterotto, 2005). The parameters of positivism consist of objectivity, empiricism, deduction, and universalism (Walsh et al., 2014). Postpositivist principles are also common and implicit throughout scientific psychology. While postpositivists recognize the existence of an objective reality; subjective, situational, and sociohistorical factors impact our ability to observe reality and make absolute claims (Ponterotto, 2005). One of the central differences between positivism and postpositivism is the use of hypothesis testing for verification or falsification, respectively. The constructivist-interpretivist perspective acknowledges the validity of multiple realities, and emphasizes the knower in the construction and interpretation of knowledge. Finally, the critical-ideological paradigm aims to highlight and interrogate inequality, power dynamics, and systemic issues produced by psychology by drawing from liberatory and transformative values.

The psychological paradigms described above – positivist, postpositivist, constructivist, and critical – overlap generously with the three foundational domains in personal epistemology and ways of knowing – dualism, multiplism, and constructivism-relativism. Positivism and dualism share similarities with respect to their beliefs in single realities and absolute truths that are separate from the knower. Belenky et al.'s (1986) received knowing and positivism also parallel in their views of knowledge as received and possessable, and knowledge acquisition as passive. Postpositivism overlaps with Belenky et al.'s (1986) procedural knowing with regards to

their strict adherence to empirical and observable methods that require control and prediction of multiple complex factors in order to discover generalizable truths. A central concern of both multiplism and postpositivism is indicated in their apprehension towards the social position of the researcher which results in a detailed attention to the processes of research. The main commonality between PE's relativism and constructionism, and psychology's constructivist-interpretivist frameworks is the recognition and integration, as opposed to management and exclusion, of researchers' social identity and research context into the analytical and interpretive process. Relativism, constructivism, and critical-ideological paradigms also demonstrate similarities with regards to their concerns about the universality, generalizability, and stability of psychological phenomena.

To the researchers knowledge, no research on PE has looked at psychologists' or psychology students' epistemological orientation towards psychology and psychological knowledge. Likewise, no research has incorporated the use of psychology's epistemological paradigms to research or theorize the psychologists' ways of knowing. This approach also suffices recommendations to shift focus away from generalized PEs with deliberate research questions that, for example, situate PE within given contexts (e.g., academic settings or disciplines, life stages; Tafreshi & Racine, 2015). How does the disciplining of, for example, psychology generate and influence individual's conceptualizations of psychological knowledge and knowing? How might certain courses within the psychology department be more conducive to shifting beliefs about knowledge? Or, how might epistemological changes reinforce or disenchant students' trust in and relationship with the discipline?

### **History of psychology**

The history of psychology, when taught critically, is invaluable to the education of future psychologists as it teaches them about the historical events and actors that shaped psychology in the present. Undergraduate history of psychology courses provides a unique opportunity for students to learn about the role of psychology in political, societal, and historical contexts. Students are taught how psychology has supported and opposed systemic structures, and psychologists roles in oppression and liberation. Learning about psychology's historical and social contributions provokes students to appraise their own assumptions about psychological knowledge and the role of an institutionalized psychology. This empowers students to advance forward in the discipline with an informed and analytical perspective, not only in the history of psychology but in whatever areas they choose to specialize in (Rutherford & Pickren, 2013). Therefore, students with a contextualized historical training are more likely than students who lack formal training, to enhance and deepen their critical thought within and beyond the course.

The history of psychology, as a subdiscipline and university course, has remained a predominately insider practice and part of the psychology department for over a century (Danziger, 1994; Barnes & Greer, 2014). In other words, the history of psychology is largely (although not exclusively) researched and taught by psychologists to future psychologists rather than being the work of historians. While some disciplines such as economics, biology, and psychology, teach the history of their discipline to their students, many disciplines do not educate their students on the history of their discipline and instead leave it to historians and their history courses. Many historians of various academic disciplines (e.g., Danziger, 1994; Brush 1974) have weighed the benefits and pitfalls of educating future academics on the history of their discipline in order to advocate for the utility and importance of insider historical practices on students' education.

Historians play a role in the shaping of disciplines by connecting events and themes to create a unified narrative (Danziger, 1994). The ways in which a historian deciphers and depicts a historical story emerges in their historical writing which is then perpetuated through means of teaching and curriculum. The determining factors that guide the historian or the educator to include certain events or actors as a part of a historical narrative is rooted in their personal epistemology. Arguably the most pressing decision a history of psychology educator needs to consider is when in the historical timeline did psychology begin. As a result, some history of psychology encompasses psychology since institutionalization, whereas other historians choose to (re)marry psychology and philosophy tracing roots back to ancient Greece. Because institutionalization took place at different times across different spaces and places, this historical timeline is further complicated, yet still relevant for educators of the history of psychology (Walsh et al., 2014).

In a similar vein, Richards (1987) distinguished between uppercase P psychology and lowercase p psychology. Psychology with a capital P was used to denote psychology as a profession and academic discipline, whereas small p psychology referred to the subject of psychology. Richards (1987) problematized this distinction in the disciplining of the history of psychology because it is ambiguous and neglects the legitimacy of what should be considered psychology's history. Furthermore, some historians of psychology distinguish between four domains when regarding psychology's history (Walsh et al., 2014). Psychological topics is used to refer to the studying of psychology adjacent subjects (e.g., memory, consciousness) but usually in a time that precedes Psychology and therefore was not yet considered to be Psychology. Psychology's separation from philosophy and other fields of study occurred prior to institutionalization and is considered a distinct domain. Despite discrepancies about the birth of

psychology as an academic discipline, resulting partly due to the fact that psychology became institutionalized at different times across different places and spaces, many historians, as aforementioned, consider this an important historical development. The final domain refers to the professionalization of psychology as psychological experts emerged in the workforce and took up positions as clinicians and other applied occupations. This distinction is critical because it envisions psychology laterally in addition to linearly while maintaining a diversified historical narrative of psychology. These discussions about the boundaries of psychology are also intended to legitimize and standardize how the history of psychology is taught.

The history of psychology is unlike much of the course content and experiences students have throughout their undergraduate psychology career. The styles of writing history employed by mainstream psychologists usually utilize a form of historical methods that Danziger (1994) describes as narrow, recent, and relevant. The purpose of this approach is to provide a recent review of related literature and dependable methods with little consideration for the history and context of the concepts being studied. Research analysing undergraduate psychology textbooks provide further examples of the way that traditional histories of psychology prioritize research methods and favour empirical evidence that can be generalized (Smyth, 2001). The use of autonomous fact statements that lack origins or references and writing in present tense was also used in psychology textbooks which neglects sociohistorical contexts in order to frame psychology as more scientific. Alternatively, Danziger (1994) espouses and imagines critical approaches that historically analyze accepted concepts and meanings, and antagonize hegemonic narratives. In doing so, historical researchers prioritize and appeal to societal and psychological issues while problematizing the achievements of scientific authorities.

Within historical studies, particularly in studying the history of certain academic disciplines, there are typically two contrasting traditions for studying and interpreting the past (Brush, 1974; Danziger, 1994). The first is often referred to as a ‘Whig’ history which typically tells a linear narrative of progress throughout a given period of time with a lack, or distortion of social, cultural or contextual factors. It is often criticized for focusing on the individual achievements of ‘great men’ or ‘great ideas’ while neglecting the contributions of marginalized and oppressed groups. This approach also oversimplifies power dynamics, such as political movements, that happen beyond the boundaries of psychology, but still impact the trajectory of the discipline. It is scrutinized for positioning the present as an accumulation of historical improvements which often leads to the past being judged through modern-day values. While most historians of the social sciences refrain from acontextual interpretations in both research and teaching, whiggish practices have been observed in mainstream undergraduate psychology courses, particularly when taught by non-historians (Barnes & Greer, 2014; Fierro et al., 2018). History taught within dominant psychology courses at the undergraduate level are relayed as largely experimental and positivistic, which suggests to students that scientific methods are more legitimate or valid when told in the context of historical advancement.

The other method used for studying and teaching history of psychology is from a critical perspective. Critical or ‘new history’ emphasizes the role of social, cultural and political contexts in permitting and shaping historical events and the influence of, typically privileged and powerful, historical individuals (Barnes & Greer, 2014; Rutherford & Pickren, 2015; Walsh et al., 2014). It is known for challenging prevailing dogmas and questioning taken-for-granted assumptions and truths which in turn encourages a more inclusive and reflexive historical practice. Critical approaches to studying and teaching history also foster and promote pluralism,

diversity and intersectional perspectives that is said to provide a more objective and nuanced understanding of both historical and present-day theories and facts (Fierro, 2018).

It should be noted that there is no clear or strict division between whiggish and critical traditions, and this use may lead to an unnecessary dichotomy. However, the methods in which historical content are framed within an educational setting are crucial for students' epistemological development. Both methods can be drawn upon appropriately at times, but privileging a critical perspective when teaching history of psychology can expand students' intellectual horizons and strengthens students involvement and interest in the discipline.

The history of psychology course – also sometimes delivered as ‘systems of psychology’ – has persisted as a component of the psychology curriculum because it provides a background on the evolution of psychological theories and concepts allowing for a deeper understanding of current perspectives and research methods (Danziger, 1994). Since psychology was institutionalized in the late 19<sup>th</sup> century, the history of psychology has been offered as an academic course despite shifting interest and demand (Fuchs & Viney, 2002). It is often taught at the upper level as a ‘capstone’ course, usually as a requirement for psychology majors or honours (Barnes & Greer, 2016). However, many universities do not require the history of psychology course, offering it only as an elective, if at all. As a result, not all psychology students are being taught the same quality historical knowledge and methods.

As psychology becomes an increasingly specialized discipline that offers increasingly diverse course options, the history of psychology course is at risk of being replaced by higher demand courses. The other issue that post-secondary institutions face when offering the history of psychology is finding a historian or anyone qualified to teach the course (Barnes & Greer, 2014). Furthermore, synthesizing an integrated approach to teaching history has also become more

difficult in the face of hyper-specialization (Rutherford & Pickren, 2015). Educators of the history of psychology have argued that with more specialized topics and subdisciplines in psychology, along with a limited class time, creating space for both breadth and depth is decreasingly feasible. Nonetheless, the history of psychology has been established within the disciplines curricula because it not only grows students' body of knowledge, but introduces students to a unique set of material and perspectives that are rarely explored outside of the course.

Another threat the history of psychology faces is partly the result of cultural debates surrounding the certainty and impact of the arts and sciences on knowledge generation and public welfare (Lilienfeld, 2012; Ferguson, 2015). While it is common in academia for psychology and history to reside in the arts, many psychologists advocate and struggle for psychology to be recognized as a science (Howell et al., 2014; Lilienfeld, 2012; Haack, 2012). The pressures for psychology to be acknowledged as a science has resulted in the marginalization and exclusion of certain fields within psychology, particularly non-experimental and non-quantitative areas (Lamiell, 2019; Barnes & Greer, 2014). In a neoliberal society where science is publicly perceived as the ultimate pursuit of knowledge, this is where funding money is allocated and why it is fiscally beneficial for psychologists to market themselves in this way (Sugarman, 2015). Philosophers and historians of science and psychology; however, tend to be more hesitant and critical of such identifications because most psychologists are neither epistemologically or methodologically on par with scientific standards (Peterson, 2016). If psychology within a certain context is considered to be a science, then it often falls under the human, behavioural, or 'soft sciences,' where it is judged as less rigorous, and lacking consensus in comparison to the 'harder' science subjects (Zagaria, 2020; Howell et al., 2014). Within

psychology, too; there are perceptions about which areas are closer to the natural sciences (e.g., neuropsychology) and which areas show a closer resemblance to the ‘soft’ sciences, including social and personality psychology (Lilienfeld, 2012).

The impact of learning about the history of psychology, or history in general, on students’ beliefs about knowledge have been topics of fluctuating debate for several decades. Similar research in the past has looked at the impact of taking a history of psychology course on developing students’ theoretical perspectives and cognitive skills (Hart & English, 1983; Henderson, 1995). Historian of science, Stephen G. Brush (1974) advocated for the inclusion of the history of science in the conventional science curriculum because it allowed for the exploration of philosophical, methodological, and conceptual issues often ignored in the mainstream. However, Brush (1974) also warned that science educators should not include history of science if they do not want students questioning current research methods or ideologies. Kurt Danziger (1994), an historian of psychology, was also a proponent of teaching a critical or contextual history of psychology to students in order to avoid the misuse of concepts and practices, and minimize presentism in future academics. Lastly, Perry (1970) wrote that being exposed to alternative ways of knowing and doing across times or cultures, specifically those offered in some courses on psychology, can trigger or accelerate a revolution in epistemological identities as students are encouraged to reflect upon their own epistemological assumptions.

History of psychology courses provide an optimal environment for diversifying and advancing psychology students’ epistemic beliefs due to its evocative material and contemplative nature. History of psychology courses are often the first, if not only, introduction to the existence of additional ways of knowing besides the dominant paradigm that permeates mainstream

undergraduate psychology courses. In a critical history of psychology course, students are exposed to competing epistemologies through past and present schools of thought which simultaneously demonstrates the connection between present-day practices and historical ideologies (Rutherford & Pickren, 2015). This allows students to investigate their own assumptions about knowledge – which they may, or may not, be conscious or knowledgeable about. Furthermore, the use of contemporary historical research presents novel ways of doing psychology that students might not be aware of if it were not for history of psychology courses. In such, students learn to acknowledge historical research as a productive approach to research rather than simply an educational tool (Barnes & Greer, 2016). Lastly, history of psychology students can explore how the philosophy and politics of knowledge shapes psychology's objects, psychologists' methods, and ultimately psychology's claims to truth and certainty. If students evolve their ways of knowing as education intends, then how students appraise and interact with psychological knowledge, and potentially the discipline as a whole, may also change.

I propose that a critical and reflective history of psychology course (i.e., more inclusion of 'systems of psychology') is ideal for understanding how the disciplining of psychology lends itself to personal epistemology diversification for two reasons. First, the history of psychology often comes from an epistemological tradition that, when delivered critically, is in contradiction to what underlies the hegemonic customs of 'scientific' psychology. The second, complementary justification behind using the history of psychology course is because students are also exposed to concepts and ideas that deeply overlap with the language used in theory of knowledge and PE research. This means that students are actively engaging different knowledge systems (e.g., Wundt's *Völkerpsychologie* and experimental psychology; structuralism and functionalism) and

how the philosophical branches of psychology are connected and interdependent (i.e., ontology, epistemology, and methodology; Walsh et al., 2014).

### **Present Study**

The main objective of this research was to explore and understand student's ways of knowing in the context of their history of psychology course experiences. In other words, does the history of psychology provide a transformative experience in psychology students' personal epistemologies? I specifically took an idiographic approach to this question as I wanted to know how the individual participants created meaning of their experiences in the history of psychology course and how they framed its impact on their knowledge and knowing. Thus, I wanted to analyze what kind of role, if any, the history of psychology course plays in psychology students' epistemological development. I chose to use a history of psychology course with a contextual teaching framework based on literature that has demonstrated the influence and impact of critical, philosophical, historiographical, and psychological perspectives on epistemological development (Perry, 1970; Danziger, 1994). This research aimed to fill gaps in the literature in personal epistemology which has recommended research examines epistemological development within a specific learning environment (Tafreshi & Racine, 2015).

The second research objective was to empirically investigate whether a critically and contextually taught history of psychology course altered how psychology students view, interact with, and position psychology and psychological knowledge. In other words, I hoped to explore how changes in personal epistemology following the history of psychology course influenced students' perceptions of and relationships with psychology in general. This research objective aimed at exploring how psychology students position their personal epistemologies in the context of psychology's epistemological paradigms. Furthermore, how do psychology students frame

their history of psychology experience within the context of their psychology undergraduate career? These questions contribute to debates about the generalizability and specificity of personal epistemologies across different disciplines (Muis et al., 2006); mainly with regards to the arts and sciences, while also including history's and psychology's position to both.

While there is a generous body of theoretical work that speaks to the importance of teaching history of psychology critically (e.g., Danziger, 1994; Pickren & Rutherford, 2015), there is far less work investigating these questions empirically. These research objectives were also intended to contribute to the literature requesting more research looking at the views psychologists hold about the history of psychology and psychology as a science (Barnes & Greer, 2014). Barnes & Greer (2014) demonstrated several institutional threats to the history of psychology's position within academia, and therefore this research was also intended to demonstrate the importance of history of psychology courses in the disciplining of future psychologists. Lastly, all of these research questions aimed to serve the purpose of understanding the epistemological positions and perceptions of future psychologists, specifically as they pertain to psychological knowledge.

I used York University in Toronto, Canada as my sample pool because it is one of very few schools in Canada with an historical graduate program in its psychology department; and therefore, one of a few schools with faculty who are dedicated to the history of psychology. I also used York University out of convenience considering I attended there during the period in which the study took place. Given the presence of faculty who specialize in the history of psychology, as well as critical psychology, the history of psychology courses at York University were considered to provide their students with the resources, material, and methods of teaching that exemplify a contextual history of psychology. Passing the history of psychology is also

required in order to receive a specialized honours from York University. York University (2024) described the history of psychology course as teaching “the discipline of psychology from a historical perspective and studies the emergence and development (and sometimes decline) of a number of theoretical systems that have influenced the nature, content and direction of psychological inquiry.”

The syllabus provided by the course director corresponded well with the objectives of the current study. The syllabus stated that the course would supply students with the historical and philosophical foundations of psychology, an understanding of theoretical perspectives and trends, and contextualize modern psychology and subject matter from a social, cultural, and historical framework. The syllabus also emphasized that reflection, participation, and discussion would be employed and promoted throughout the course. Students were assigned one required reading and one supplementary reading. The required text was Pickren & Rutherford’s (2010) *A History of Modern Psychology in Context*, while students were also encouraged to read Foucault’s (1961) *Madness and Civilization*. The grades for the course were assessed using a single group assignment that was broken into four parts over the course of the semester. The syllabus provided little further information about the nature (e.g., topics, format) of the assignment. Both the aims and the material provided in the course aligned with my notions of a critical history of psychology and served the research objectives.

## **Methods**

### **Participants**

Participants were recruited through coordination with the history of psychology course professor who taught at York University in the fall semester of 2023 – only one section was offered that semester. The primary researcher provided the course director with an email to

distribute to the class containing details about the study, resulting in a total of 266 students having had the email shared with them. To be included in the study, participants had to have completed the course and received a final grade. The other inclusion criterion for this study was that students were declared (or declaring) psychology majors or honours, because the focus of the study is on the history of psychology experience as it exists *within* the undergraduate psychology curriculum (i.e., not as part of the history or philosophy department). No other exclusion criteria were used. A total of 4 students signed up to participate in the study and all were included in the analyses. Participants received a \$25 e-transfer as compensation for their participation and were assured that participation in the study was voluntary and that their anonymity would be secured prior to receiving consent.

### **Data Collection**

Prior to interviews, I emailed the course director and requested a copy of the course syllabus for the session I was sampling from. This served to understand the types of material students were exposed to, the degree of criticality applied throughout the course, and aided in determining some possible limitations. The syllabus also acted as a reliability measure towards participants responses, and vice versa.

The data was collected by interviewing participants one-on-one with open-ended questions regarding their personal epistemologies and history of psychology course experience. The students were assessed using a modified version of the WAYS interview originally created by Belenky et al. (1986; see Appendix). However, the interviews in the present study relied on a semi-structured format to allow the interviewer and interviewee to explore and crystallize ideas and meanings during the interview process (Lahtinen & Pehkonen, 2013). The aim was to engage students in a reflective process about their personal beliefs about psychological

knowledge and its truth, with particular emphasis on the influence of their history of psychology course experience. The interviews were offered in-person or over Zoom, to which all participants opted for virtual meetings. The interviews lasted approximately one hour per participant. All participants consented to having the interviews audio recorded which were then manually transcribed by the interviewer.

## **Thematic Analysis**

### ***Theoretical underpinnings***

The interview data was qualitatively analysed using thematic analysis. There are various iterations of thematic analysis that are broadly used, but the data in the study was analysed by applying the version created by Braun & Clarke (2006). Thematic analysis (TA) can be useful for studying PE due to its flexibility both in regards to theory and methodology (Braun & Clarke, 2006). Unlike many other qualitative approaches, TA need not be grounded in any particular theoretical framework but it can be used as a tool in various methodological and theoretical backgrounds. Despite TA's theoretical freedom, there is always the assumption that researchers approach research from an epistemological framework and that value neutrality is a myth (Braun & Clarke, 2006). In the case of this project, a constructionist perspective is what the methods most adhered to. Themes are constructed rather than 'discovered,' as researchers play an active role in the research process, largely by having a guiding research question (and personal epistemology) that influence the interpretation and organization of data into codes and themes (Braun & Clarke, 2006).

Furthermore, in a study on PE where the concept of interest is broadly defined and loosely classified, flexibility and openness to unique perspectives rather than pre-existing categories put forth by previous researchers may better serve to answer my research question.

TA can also be “used to identify patterns within and *across* data in relation to participants’ lived experience, views and perspectives, and behavior and practices,” (Clarke & Braun, 2017, p.297) which is useful given that research on PE often diverges into two streams of studies that make comparisons either within or between individuals.

Nonetheless, the approach to PE and ways of knowing was more theoretically grounded given the rich literature on the topic. On the other hand, the thematic analysis of the history of psychology experience trended towards exploratory due to the lack of literature on this topic.

### ***Analytic Approach***

Braun & Clarke (2006) outlined 6-steps in their approach to thematic analysis which guided the analytic process in the current study. The aim was to first analyze transcripts of the interviews at the individual level for themes pertaining to personal epistemology before seeking overlapping or diverging patterns across participants’ responses regarding their history of psychology experiences. The transcripts were orthographic, meaning they included all verbal utterances as well as some non-verbal sounds such as laughing and interjections (e.g., “hm”, “um”, “oh”). During transcription, a few initial codes were created inductively by prioritizing the data.

Once each interview was fully transcribed and familiarized by listening to, reading, and re-reading the interview transcripts, phase two began and I manually coded each transcript individually once more. While the literature that categorizes epistemological thought and development was theoretically informative to my research, I was more interested in understanding PE as subjective, individualized, and particular to each students’ experience, which is why I relied on prior models as a guiding rather than exhaustive or decisive tool. In other words, this stage was largely inductive (i.e., did not rely on theory) and required bracketing

in order to favour participants' subjective experiences and minimize my expectations which are based on previous literature, theories, and my own experiences. Coding in thematic analysis can be semantic, where surface meanings and what is said is directly reported, or latent, which aims to interpret underlying meanings, and themes are interpreted beyond what is explicitly stated. The current project aimed to examine the data on a deeper level in search of more nuanced descriptions. Manual coding in this project looked like reading through the transcripts while highlighting and noting in the margins (using Microsoft's 'comment' feature) data items that were relevant to the phenomena under investigation. The data items, as well as any relevant codes, were then transferred to a spreadsheet with surrounding dialogue or context cues added for reliability. Over 70 codes were created for the more than 130 extracts pulled from across the four transcripts.

The next stage of thematic analysis was to compare and collate the codes into themes (Braun & Clarke, 2006). Due to the research question covering two topics (i.e., personal epistemology and history of psychology course experiences), I colour-coded the codes based on what part of the research question they were most relevant to. In addition to these two topics, I also constructed a third topic during this stage which focused on students' perceptions and experiences of academic psychology in general. The codes pertaining to personal epistemology were checked within participants (i.e., idiographic) first, followed by comparisons across participant coding in order to initially develop individualized analyses. The codes and themes for PE were also compared with Perry's (1970) and Belenky et al.'s (1986) models throughout this stage of the analysis. With each code separated into one to three of the categories – as a handful of codes fit under more than one topic – the formation of the thematic maps was started. This process involved listing and organizing codes that were similar together, using pen and paper to

create visual maps, and constructing overarching themes. Not every code was used in the initial thematic maps, but they were not discarded at this point.

Once the first draft of thematic maps and potential themes were created, phase 4 began and consisted of reviewing and refining the themes (Braun & Clarke, 2006). Academic psychology had the lowest amount of candidate themes going into this phase, followed by history of psychology experience, with personal epistemology having the greatest number of codes and themes. Arguably, this is likely due to the nature of the interview questions being drawn from interviews on ways of knowing and thus being the main focus of the interviews. Using the candidate themes and sub-themes, I read over the coded extracts within each theme to check for internal homogeneity (Braun & Clarke, 2006). Some extracts and codes were changed, moved, or dropped to ensure each theme was consistent and coherent. For example, the sub-themes *Supportive* and *Contradictive* were originally lumped together and later separated, while other candidate themes or codes (e.g., history of psychology as surprising, as disappointing) were subsumed into these sub-themes. The candidate theme psychology experience was changed to *Psychology and Psychologists* in order to encapsulate the participants' more general answers about their perspectives on systems and actors in psychology, in addition to their personal experiences as undergraduate psychology students. Lastly, the final themes were reviewed to make sure they coherently linked back to the research questions.

Phase 5 involved constructing clear definitions for the themes by identifying and confirming the themes' and subthemes' fit with the features of the data. Braun & Clarke (2006) recommend that thematic codes be consistent within each category and that themes are distinct from each other in order to provide breadth and richness to the thematic descriptions. Every theme was ensured to have a meaningful quality that complemented and connected the other

themes without overlapping or repeating them. Many of these analytical stages were iterative rather than exhaustive and required moving back and forth throughout them. Once the final themes had been refined and organized, the results were reported.

It was anticipated, based on previous literature about personal epistemology, that participants may engage or populate more than one epistemological position at a time. For the sake of consistency in the results, however, all the participant's responses were categorized to epistemological positions based on an interpreted best fit. The best fit was determined through a hermeneutic and holistic perspective by analyzing participants' transcript as a whole rather than counting instances or codes of each theme for the largest sum. While I remained open to the possibility of participants not suiting any of the pre-existing categories, that was not the case in the end.

## **Results**

Results were arranged into two domains: history of psychology course experience and personal epistemology. The two categories pertaining to psychology were analysed and are reported at the group level whereas the results regarding personal epistemology were individualized. In other words, themes related to experience in the history of psychology and perspectives on psychology were aggregated to account for the exploratory nature of the research questions and lack of theoretical foundations. Themes pertaining to the participants' personal epistemologies were idiographic and personalized to account for the subjective features of the phenomenon.

### **Personal Epistemology**

As aforementioned, the results for personal epistemology were based on idiographic analyses in order to generate an individualized account for each participant. Each participant was

organized into one way of knowing based on either Perry's (1970) stages or Belenky et al.'s (1986) domains. Participants were not sampled for, or asked demographic questions about their gender, therefore using both schemes allowed for the inclusion of potentially gendered experiences without miscategorising them. Nonetheless, both models of knowing contain similar foundations of dualism and absolutism, followed by multiplism, relativism, and constructionism. The reason that participants were assigned to epistemological positions despite some of the concerns mentioned in the literature was to contribute and enhance conceptualizations of personal epistemology. The domains were also used to provide insight on the first research question regarding the impacts of the history of psychology course on students' personal epistemologies. Each participant's analysis contains excerpts and descriptions to illustrate the subthemes which are intended to represent the epistemological positions (See Table 1 for outline). Aliases were used to protect the anonymity of participants.

The results on participants' personal epistemologies reflected much of the previous bodies of work in personal epistemology and history of psychology which suggests that students expand their ways of knowing in a manner that typically includes moving from a more dualist and positivist theory of knowledge to one that encompasses relativist, interpretivist, and critical epistemological principles.

**Table 1**

Outline of Student's Epistemological Positions

| Participant | Epistemological Position | Sub-themes                              |
|-------------|--------------------------|-----------------------------------------|
| Taylor      | Early Multiplism         | Emphasis on process                     |
|             |                          | Dissolution of authority from absolutes |
|             |                          | Knowledge and knower as separate        |
| Jordan      | Procedural               | Knowledge as contextual and relative    |
|             |                          | Appreciates structure and specificity   |
| Casey       | Received                 | Knowledge as transferable               |
|             |                          | Confidence and knowledge sharing        |

Riley

Subjective

Knowledge from experience and within  
 Truth as comforting and relatable

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### **Taylor – Early Multiplism**

#### ***Emphasis on processes***

To Taylor, the methods used for finding knowledge and the justifications for knowledge supersede the content of knowledge. While Taylor still ascribes to dualist and absolutist views of knowledge, they have begun to accept alternative and plural methods to knowledge discovery. While there are still wrong answers, there are no wrong methods for Taylor: “I’m not going to say well ‘oh they’re not a true scientist if they’re not doing it that way’ because that would be fallacious.” By prioritizing the processes involved in coming to a knowledge claim, little consideration is given to the knowledge itself. According to Taylor, opinions that are grounded with justifications are inherently more valid than opinions that are not.

One way of putting it, some people aren’t bright – have a tendency to have weaker opinions.

In some ways there can be – and they won’t really be able to ground them at all. Even if I disagree with someone, if someone is able to say this is my opinion and here’s why and is able to present arguments for it, I can respect those opinions much more than I can someone who says this is my opinion and I say okay what are your reasons and they say ‘come on, man, it’s just as good as yours.’

When asked how they would handle a disagreement between experts, Taylor expressed confidence in their ability to “navigate the arguments myself to see if there are fallacies or weak points without trying to interrogate the knowledge yourself. Myself knowing I’m not an expert in this area.” Deeming the validity of knowledge, Taylor focused on the processes and justifications involved in knowledge generation as opposed to questioning the knowledge itself.

### ***Dissolution of authority from absolutes***

At the beginning of the interviews, Taylor explicitly stated that they “have respect for academia” and professors, and that they view professors in an authoritative light. Yet Taylor displayed a general distrust of authorities and experts abilities to provide unbiased and objective knowledge. In discussing some of Taylor’s experiences throughout undergrad and in the history of psychology course, they claimed they are “less willing to take what professors say at face value.” For Taylor, the ideal role of the authority is still to impart knowledge, however, they are not always doing it optimally. For example, Taylor repeatedly voiced their fear of biases that everyone, including experts and authorities, have that influence their knowledge. Taylor also illustrated a few situations where they had disagreements with professors which likely contributed to their skepticism towards authority. Nonetheless, Taylor had little issue with obeying their professors and “strategically structur[ing]” their work in order to appease their requests. In cases where Taylor did not agree with the professor on repeated occasions, they shared that they would placate to professors because they did not want to “sully [their] relationship with someone who has control over [their] grades.” Although there is a dissolution of authorities from truth for Taylor, they still appreciate what experts and authorities can contribute to their learning, whether they provide useful tools or skills for discovering knowledge or act as more of a means to an end, such as applying the expert’s methods in order to receive a good grade and progress their scholastic achievements.

### ***Knowledge and knower as separate***

Taylor espoused the standards of objectivity and described knowledge as being separate from the knower. They took a position of detached knower who views experts as messengers, rather than creators, of knowledge. Taylor ascribed to a positivist perspective when they spoke

several times about “science in a sort of ideal pure state” that is protected from subjective opinions. It is the job of researchers and experts to be impartial observers seeking out neutral knowledge. Taylor further disconnected disciplines from supporters: “I would say scientists themselves not necessarily but science in principle it should be searching for the truth as objectively as a way as possible, but in practice it’s not always happening that way.” When Taylor was asked if there were any questions that did not have clear right or wrong answers, they responded with “not one that is obvious, that’s all I’ll say. Not necessarily none whatsoever, not one that is obvious.” Taylor believes all knowledge can be possessed, and although some knowledge is seen as more complex, methodological rigor should lead researchers in the right direction. In addition, Taylor was unconvinced of relativistic and contextual principles. While reflecting on his experiences in the history of psychology course, Taylor stated “that very sort of relativist conclusion it seemed to me it was not a particularly strong argument.” Concurrently to taking history of psychology, Taylor took evolutionary psychology and explicitly stated that they “resonated more with the idea that there’s a truth out there somewhere even if we failed at trying to find it in the past.” To Taylor, the knower and the knowledge may be independent and separate, but relying on the standards of objectivity and logic will aid in determining the legitimacy of knowledge.

Taylor’s postpositivist approach to knowledge and knowing is relevant and connected to the pervasive impression of psychology as a science (Barnes & Greer, 2014). While this subtheme illustrates many of the points made in Perry’s (1970) stages, it also relates to other concerns in PE concerning ‘personal’ and ‘disciplinary-specific’ epistemologies. Because Taylor displayed a way of knowing that heavily overlapped with epistemological and methodological sentiments in scientific psychology, and given the context of the interview being on experiences

in psychology courses, it is important to address the nuance and difficulty in trying to tease apart what is Taylor's orientations towards knowledge and knowing and what is an epistemic product of the landscape in which psychological knowledge is produced.

### **Jordan – Procedural Knowing**

#### ***Knowledge as contextual and relative***

For Jordan, knowledge is relative to every context and facts are seen as mutable. They exemplified this in their statement, "facts aren't always concrete, things can change." Prior to the history of psychology course, Jordan recalled viewing facts as something they took "seriously." Knowledge was to be taken at face value and not questioned. After the history of psychology class, Jordan took a much more anti-presentist stance towards knowledge:

When it comes to what's true even though there's facts and evidence there could be something that's true right now but not true in the future so I think also when you think of what's true it's also still having a kind of open mind. Yeah, acknowledging this is true right now but the facts and evidence we have right now might be true for me or this situation but in the future, it might not be true or there could be other things that kind of dispute that.

To Jordan, knowledge is susceptible to shift and change, over time and across places.

Jordan applied this outlook to a variety of examples throughout the interview including intelligence testing, the 'planet' Pluto, and end-of-life care. In the instance of IQ testing, Jordan shared that it is

Not that I don't take it as seriously but I see that there's a lot of, not fault, but like it's not perfect and I feel like it's kind of changed the way I would see someone if their IQ was a super high number I feel like before I would think that, 'oh ya, they're like super smart' but

now I feel like maybe that score or number is not really indicative of their true intelligence. I think one thing I learned was that intelligence testing was a lot more to do with how people would perform in school but not really it's not really – I don't think it's really indicative of how smart they are overall, like in the real world or in other situations. So, I think that kind of changed.”

While standardized measures and methods can provide useful insight, Jordan frequently voiced concerns about the limits of universal knowledge and exemplified issues regarding construct, measurement, and ecological validity. Jordan employed this perspective beyond the discipline of psychology while we were discussing the way knowledge is classified when they prompted that “I just think of like Pluto, like Pluto used to be considered a planet but now it's not but at the time it was a planet.” Knowledge and truth, for Jordan, are subject to who, where, and when they are known as these, rather than an absolute reality, is what produces the criteria for knowledge justifications.

### ***Appreciates structure and specificity***

Jordan presented herself as someone who appreciates order and structure in their life. When asked to describe themselves, Jordan responded “I'm very orderly. I like routine. I typically follow like a schedule and I like to have things planned out. I'm pretty detailed that way.” Jordan appeared adamant about keeping themselves on a clear path, but also held others to a similar standard. In an academic context, Jordan preferred transparent and direct instructions over vague and ambiguous guidelines. Jordan stated that they would rather take exams than write papers because it provides a sense of predictability. While Jordan suggested that they enjoyed the “freethinking” and open-ended nature of some assignments and courses, such as the history of psychology, they typically preferred courses where there is a “right answer or you kind of know

what the prof[sic] is looking for.” When it came to writing without a concise outline, Jordan detailed their process as not having “a lot of direction so it felt like there was so much stuff it was easy to get lost or lose your point because you’re just talking about whatever, keeping it to a certain word limit.” Without a clear direction or structure, Jordan views themselves as becoming adrift amongst the endless possibilities of knowledge.

### **Casey – Received knowing**

#### ***Knowledge as transferable***

Casey views knowledge as independent from knowers and therefore transferable from teacher to learner. Although Casey did not explicitly describe themselves as a listener or recipient of knowledge, they did speak of others (e.g., students) “being swayed a certain way not necessarily because that’s what’s true but because that’s what the person teaching you feels.” To Casey, what is taught is most often what is learned. People or students who cannot or are not “meaningfully prompt[ed] to think critically” are the most susceptible to absorbing knowledge at face value. Because knowledge is transmitted from knower to knower without interpretation, Casey holds educators and experts to a higher standard than laypeople by expecting them to only provide “high quality unbiased perfect content.” In other words, the student has little to no control over the learning process or content being shared and therefore the teacher’s role is expected to provide only updated and accurate knowledge. Self-knowledge can also come in the form of received knowledge and much of Casey’s self-knowledge came from others.

The idea to start [university] which I think came from my environment and the people I had in my life, like I had people who were encouraging me in terms of what I’m capable of and reaffirming those things I maybe didn’t think of or feel strongly enough myself.

Prior to starting university, Casey stated they felt their family did not support their academic interests which caused them to shy away from post-secondary education, further demonstrating their complacency with others impositions of them. However, once Casey felt encouraged to follow their academic pursuits, they described feelings as though others' perceptions were "reaffirming something deep inside I felt I had but I didn't have enough I didn't feel it strongly enough myself to do anything about it." Casey spoke highly of the support and encouragement they received to attend university, while simultaneously expressing pessimism about how "other peoples' opinions have a lot of power although I don't love that that's the case, I think that it does influence me and I'm sure other people too."

This subtheme in particular resonates with psychology's epistemological paradigm of positivism. Casey positioned the knower, at least when not "prompt[ed] to think critically," as a passive learner who dispassionately observes and absorbs knowledge. Although Casey countered many of positivisms claims including universality and absolutism (e.g., "I think there's more relative truth than universal truth" and "I don't know if I would call opinions good or bad but they can all be valuable"), this points to the participants' awareness of their epistemological changes (i.e., from positivism towards postpositivism) and apprehension towards a strict positivist orientation in psychology.

### ***Confidence and knowledge sharing***

Casey expressed that they had a fear of failure or being wrong that kept them in a position of listener rather than speaker. In describing their hesitation to start post-secondary education, they explained that they have "a lot of sensitivity around fear of failing or like letting people down." Her fear often manifested as self-criticism and self-doubt that kept Casey from viewing themselves as a self-sufficient knower. Casey juxtaposed confidence with fear several

times stating that “I think that over time I’ll continue to grow in terms of my confidence, my skills, like in terms of myself being more confident being able to like share the things that I know with the people I love.” Without confidence to share her own skills and knowledge, Casey is left without a voice and has positioned herself as a listener more than a knower. To Casey, however, this stage is likely only temporary as they described the relationship between skills and confidence as “bidirectional in a way the more confidence I have the more eagerness I have to keep building on skills but then also the more skills I have the more confident I feel in what I’m doing.” As their confidence grows, they see themselves as becoming a contributor of knowledge: “I hope that I’ll grow into a position or place where I have the means but also the ability to share all the things that I’m learning.” However, until then, this comparison demonstrates that Casey can feel knowledgeable and learned while still lacking the confidence to contribute in various situations.

### **Riley – Subjective knowing**

#### ***Knowledge from experience and within***

Riley views the self as the arbiter of knowledge and described all knowledge as subjective to each individual by varying degrees. Knowledge is internalized for Riley and the answers to questions can be found “in [their] head.” To Riley, “everybody has their own truths and they should feel valid for their own thinking,” even if others disagree with them. As a result of differing opinions and experiences, disagreements are bound to occur. However, for Riley, when disagreements do happen, they listen to all sides before “trusting [their] own instincts.” Everyone has a different background and has endured unique experiences that contribute to their knowledge. Truth, knowledge, opinion, and fact are synonymous to Riley, in the sense that each are the result of an individual’s interpretation: “maybe to your reality it doesn’t fit what another

person might say but in that person's opinion that is their reality so for them it is factual."

Throughout the interview, Riley grounded many of their answers in "personal experiences" and anecdotes as a way of justifying their answers. When Riley was asked how they would know someone is an expert, they responded

Honestly, I would rely more on experience than I would like academic achievements. To me that's more important because sure you can study all you want and write the tests but when it comes to an actual understanding of the concept you don't really know everything you know until you bring it out into practice so I would say the people who are the most experienced are the most knowledgeable.

When asked if they felt like they could rely on experts, Riley replied,

Everybody has a different reality and what is seen sometimes as right in one person is seen as wrong in another person and, even though they're experts, they still have a biased opinion so I would say they are reliable up to an extent."

Riley also illustrated an experience when they had "trusted a nurse's opinion much more than [they] did the doctor's" despite usually being "inclined to the person with all the degrees and licenses to back them up." This subtheme speaks to social power dynamics specifically in the medical field when Riley made a reference to their reliance on structural and situational contexts and their own subjective position in determining a truth that serves them and their reality.

Therefore, to Riley, experience and understanding trump certifications. The more experienced an individual is, the more knowledge they will have and experience can come from means beyond formal education.

***Truth as comforting and relatable***

Riley described knowledge and truth as something that should comfort and compel a learner. When asked what people mean when they say they are searching for the truth, Riley responded that “it’s something to bring them comfort that they understand and can relate to whether it be a way of living or how to better yourself.” Riley also showed appreciation for knowledge, specifically course material, that they could relate to or that they felt represented in. While describing their experiences in the history of psychology course, Riley stated that they would often link the content to their own experiences in order to get a “better understanding of myself.” Learning knowledge that is relatable to Riley made them “feel more accepting” of their own self and their struggles. Riley described relatable knowledge as more “memorable” and easier to understand and interpret. For Riley, truth is something an individual identifies with and knowledge that does not align with or serve you can be ignored. When Riley was asked if any opinions are as good as the next, they stated that

If somebody thinks that one thing is right, but you personally can see that it would not benefit you, then I would say that, again, this is very subjective to each person. Their own right is right, and if you have a problem with it, then don’t be involved in that situation.

What is correct and what is knowledge to Riley, is whatever feels right to the knower.

Both of Riley’s subthemes correspond to both constructivist-interpretivist and critical-ideological frameworks in psychology. Riley’s positioning of knowledge is intimate and personal to a knower, and the acceptance of multiple equally valid truths is similar to the constructivist-interpretivist paradigm that views knowledge, meaning, and reality as constructed and reflected upon by the knower. Both Riley’s PE and psychology’s constructivist and critical domains also interpret knowledge and knower as inseparable by pointing to the power relations, sociohistorical context, and subjectivity of the knower.

## History of Psychology Experience

All the participants answered a series of questions about their experience in the history of psychology course, particularly as it compared to their undergraduate psychology experience thus far. Participants were asked if anything in the course surprised them and if it changed how they see the world or psychology. Given the minimal literature on this topic, I explored two main focuses in this section. The first objective was to explore how the history of psychology course experience changed students epistemological orientations, and more specifically their ways of knowing psychological knowledge. Second, this section attempted to answer whether changes in students psychological ways of knowing influenced their relation to the discipline. These results were organized based on between participant analyses in order to account for the more exploratory and data-driven approach to the research question.

Two themes were developed for this topic: Contrasting Accounts within Psychology, and Psychology and Psychologists; they are supported by the subthemes and extracts (see Table 2 for outline). These themes derived predominately but not exclusively from the two interview questions listed above. Students responded in a few different ways which were organized into subthemes.

**Table 2**

Outline of History of Psychology Experience Themes and Subthemes

| Theme                                  | Subtheme                                                            |
|----------------------------------------|---------------------------------------------------------------------|
| Contrasting accounts within psychology | History of psychology as distinct                                   |
|                                        | Contradictive                                                       |
|                                        | Supportive                                                          |
| Psychology and psychologists           | Psychology within the hard-soft science scale                       |
|                                        | Psychologist's responsibility to people, knowledge, and experiences |

### *Contrasting Accounts within Psychology*

### **History of Psychology as Distinct.**

All the students posited that the history of psychology narrates a different account of psychology that more readily implicates its past in our present psychological knowledge and practices. Students described the course as positioning psychological knowledge as contextualized and “relativistic.” The participants described the course as being more “open” and “free-thinking” than other courses in the sense that there was freedom to develop their own arguments and less rigidity for single truth answers. One participant described the course as being more philosophical than other courses they had taken in psychology. Some of the participants directly compared it to other courses they had taken including evolutionary psychology and abnormal psychology. Several of the participants commented that the history of psychology is broad yet connective, and covers many of psychology’s subdisciplines. One of the students exemplified this point when they stated that

The nature of the course and what we were being taught, it made me appreciate the heterogeneity of the field more so than I had before coming out of, you know, the previous courses that I had taken. I knew it as psychology as very divided into subgroups – understanding there’s not just developmental psychology and personality psychology and there’s cognitive psychology and they’re all filling in different gaps but they don’t really know each other and viewing it more as no there are actually groups in the field that are at odds with one another. I appreciated that a lot more coming from the course.

While the antagonistic view of schools of thought is a topic for another paper (e.g., Zagaria, 2020), this comment demonstrates the course was expansive and encompassed numerous fields and topics in a connected manner.

### **Contradictive.**

Some of the students recounted how the history of psychology course introduced them to, not only, novel content and alternative approaches in psychology, but also a “tone” that was unfamiliar to them. This tone was illustrated by the participants as critical and “relativistic.” While one of the students (Casey) spoke positively about the experience and intended to maintain this style of reasoning moving forward, the other student (Taylor) in this theme interpreted this approach much more negatively. Casey described the course as being “eye-opening” to critical issues in psychology that they were previously unaware of. They further stated that this increased their feelings of engagement with the course material and altered their understanding of psychological knowledge. Taylor was also appreciative about some aspects of the course, but argued that the course’s tone was “rhetorical” and ineffective. Both students described the course as contradicting much of what they had learned and thought about psychology, albeit with mixed reviews.

### **Supportive.**

While two the participants found the history of psychology course to counter mainstream psychology and contradict their pre-existing knowledge regarding psychology, the final two participants described the course as confirming their previous suspicions and assessments of psychological knowledge. When asked if there were any changes in views towards psychology following the completion of the history of psychology course, one participant (Riley) responded “I wouldn’t say it changed it. I’d better describe it as it just like confirmed what I thought about it already.” Furthermore, the course provided Riley with “more details about the things that I knew already.” When asked the same question, the other participant (Jordan) in this subtheme initially responded that the course did alter how they see certain psychological knowledge. However, later on in the interview, when the participant was asked if their way of knowing had

changed, specifically as a result of taking the history of psychology course, the participant responded “I think I’ve always been kind of skeptical, even before entering university.” For these students, the history of psychology course validated and provided support for their prior views on psychology.

### ***Psychology and Psychologists***

Throughout the interviews, several comments were made by the participants about psychology as an institute and psychologists as a body of individuals. These comments were significant during the analytical process but did not fit with the other major topics that originally defined this research. This section is illustrated by two subthemes described below.

#### **Psychology within the Hard-Soft Science Scale.**

Some of the participants spoke about psychology as a soft science, while others positioned it as a harder science. One of the participants that contributed to this subtheme apposed psychologists with “hard scientists like chemists, physicists.” Participants provided two main arguments for this rationale. Psychology is not objective or universal enough to be classified with other sciences because, according to one participant,

When it comes to like psychology like I feel that’s a very subjective field, and it differs with every case, with every person. So, I think it’s definitely possible to find the truth for everybody, what is their truth; but collectively, I don’t think it’s that easy.

The other concern for this student is that studying people is unpredictable, uncontrollable, and requires consideration of far more “factors” than the hard scientists need to consider. From this participant’s perspective, methodological rigour and standardization in the field will not bring psychology closer to absolute truths or a hard science designation, and seeking generalizable truths in psychology may even be counterintuitive.

On the other hand, another participant uncertainly positioned psychologists as scientists: That's sort of what science is in my view. So, to the extent that we're going to say – to the extent that psychology is a science is to the extent that there's going to be ideas that are falsified and moved on from. It just so happens that in the case of psychology, and biology as well of course, it has to do with actual people.

For this participant, psychologists who follow Popperian logic are inching towards absolute certainty and adding to the scientificity of the field (Walsh et al., 2014). Unlike the previous example, this participant implied that epistemic, methodological, and technological improvement will form psychology into a science. Furthermore, both of the participants' extracts capture Ian Hacking's dynamic nominalism and his constructs of human and natural kinds. According to Hacking (2006), labels, meanings, and applications of both natural and human kinds are produced to serve a specific cultural and sociohistorical context. Human kinds, which are predominately the domain of social scientists, however, are particularly sensitive to a looping effect, meaning people can reflect and (re)constitute what that kind of personhood is like by embodying and materializing the classification. Both of the participants instances of "actual people" and "persons" as the focus of psychology accompanied by the positioning of the study of people as "subjective," individualized, and context-dependent further frames psychology as a softer domain. Further concerns were raised by several of the participants about psychological measurements and constructs shortcomings in comparison to other scientific disciplines. For example, some of the participants displayed concerns about the universality and ecological validity of standardized methods (e.g., IQ testing, personality testing), and the reliability of measurement tools (e.g., Likert scales). As a result, the participants warned it is difficult for

psychologists to generate universal knowledge or reach a consensus the same way the hard sciences have.

### **Psychologist's Responsibility to People, Knowledge, and Experiences.**

Three of the participants held psychologists to a high ethical standard and expected an unwavering moral responsibility to knowledge from them. While all of these participants expressed that psychologists should adhere to the facts and avoid biases at all costs, two participants additionally expressed discontent with psychologists' care and accountability for the knowledge they produce and disseminate. According to the participants, psychologists have a moral responsibility to knowledge because their subject of research is people and it is their duty to avoid, as well as correct others, epistemological violence (Teo, 2010). In other words, psychological knowledge produced by psychologists should not cause harm, marginalize, or discriminate against others. For example, one participant compared psychologists, as well as psychotherapists, to other scientists, artists, and public figures, stating that "there's certain responsibilities if you're a psychologist to in some way not be negatively impacting people." Participants positioned psychologists as being accountable not only for the knowledge they produce through research, but also the dissemination and transmission of psychological knowledge in realms within and beyond academia. For the participants, psychologists are obligated to consider the ongoing influence and impact of their personal conduct and knowledge on students, patients, and the public. Specifically, two participants spoke of vulnerable populations (people with disabilities, past traumas, mental illnesses or chronic illnesses; youth; the "naïve" and uneducated) who they viewed as especially susceptible to psychological authorities and knowledge either because they are the topic of study or because they are the targeted audience. The participants exemplified the differences between morally and immorally

responsible psychologists by drawing upon their own experiences as a psychology patient, student, or consumer. Professors and health care professionals, for example, who were sympathetic, humanistic, non-judgmental guides were contrasted with apathetic and authoritative psychologists who made the participant feel as though they “don’t care” about patients’ and students’ problems. For the participants, practicing and applying psychology should necessitate a care and responsibility to all people, experiences, and knowledge.

### **Discussion**

The primary intention for this study was to examine if, and how, the history of psychology course altered students’ personal epistemologies. The second question that the research aimed to address was if, and how, the history of psychology influenced students’ perceptions of psychology as an institution, psychologists as professionals, or psychology’s subject matter. Lastly, the research planned to examine whether epistemological changes resulting from the history of psychology course undermined or enhanced students’ feelings towards the discipline. All of the research analyses were completed using a thematic analysis and drew from a social constructionist perspective. While the first research question was addressed using a deductive approach and relied on prior theories and models of personal epistemology and development, the last two questions were more exploratory and were addressed using between-participant analyses to inductively develop themes.

The four participants were organized into four categories, three of which were based off of Belenky et al.’s (1986) model and one which was categorized using Perry’s (1970) scheme. While both models follow a similar developmental trajectory, it is important to note that there are divergences and the stages do not develop in parallel. For example, Taylor displayed traits similar to those of procedural knowers, however, they still ascribed to absolutist and hegemonic

views on knowledge without the same concern for disempowerment that is seen in Belenky et al.'s (1986) ways of knowing. Although the participants displayed differences in their views on and experiences with knowledge and learning which resulted in them being organized into different domains, some participants still bared similarities with other knowers. Taylor and Jordan both described themselves as being shy, quiet, and reserved; however, their views on the connection between knowledge and knowers and their duty to knowledge and other knowers were distinct, ultimately leading to their resulting classifications. The view that knowledge and knower are intrinsically connected was common for Jordan and Riley but their external and internal locales (respectfully) for knowledge cleaved them.

While Taylor and Riley fit quite well within their epistemological themes, the other two participants were more varied and imprecise, and could be described as straddling more than one way of knowing. This notion resonates with the concerns about hierarchically structuring epistemological development by suggesting students can occupy more than one epistemological position simultaneously.

None of the participants were categorized under the 'final' stages, contextual relativism and constructed knowing, however all participants displayed varying signs of shifting towards this position. In general, the participants applied relativist and constructivist principles to psychological knowledge and other human science disciplines, while maintaining the natural sciences as seeking objective truths and general laws, or at least closer to than psychology. All of the participants displayed, at least a tolerance or, at most an inclination towards pluralist values. However, most of the participants lacked an awareness of, or ability to integrate, their own voice into the construction of knowledge. Given the tendency for psychological research and other forms of psychological writing to adopt autonomous statements and detached styles of reasoning

(Zagaria et al., 2020; Billig, 2011), more research might find a connection between these two phenomena.

The participants provided mixed responses regarding the relation between their personal epistemology and their experience in the history of psychology course. Although no participant directly attributed their PE to the history of psychology course, all the participants displayed opinions in favour of (or against) anti-presentism which they explicitly or indirectly connected to their experience in the history of psychology course. While two participants found the course supported their prior beliefs about psychological knowledge as being more contextually relative, the other two participants found the course contradicted what they previously thought about psychology being scientific and progressive. Overall, the history of psychology course contributed to or reinforced the development of epistemological doubt in in some of the psychology students' strict empirical and realist perspectives.

There were two emergent themes about psychology and psychologists. Three of the four participants positioned psychology as a soft science in comparison to the natural sciences. The students exemplified their concerns with psychology using issues of replication, methodological rigour, validity, objectivity and many more. This framing of psychology within a scale of harder and softer sciences is also supported by Zagaria et al.'s (2020) research which examined "the "soft" nature of psychology." According to Zagaria et al. (2020), a lack or minimal consensus in psychological constructs and theories, and a slower accumulation of knowledge than the "harder" sciences is what lends to psychology's softness. With regards to PE, these finding should prove useful to debates about whether PE is general and stable across domains, or whether it may be domain-specific (Muis et al., 2006). This research suggested that students ascribe to different epistemological positions based on the discipline of focus.

The other theme that emerged was related to the authority, power, and responsibility the participants applied to psychologists. Because psychologists are experts on psychological knowledge, they are expected to display a greater degree of care for fair and just practices and knowledge claims. Obviously, all academics are expected to uphold a high ethical standard; however, psychologists are expected to apply principles of morality to all contexts of their everyday lives. Furthermore, psychologist's studies of human kinds should necessitate an awareness and culpability in the process of constructing and applying psychological knowledge and labels.

### **Limitations**

The present research had several limitations that hindered the analytical process and constrained the scope and strength of the results. The first limitation was due to the small sample size and the use of one course section as the sampling pool. While the four participants provided a promising beginning to answering the research question, the study aimed to recruit at least eight students which could have reinforced or extended the group-level themes. The main limitation with sampling from a single section was that the history of psychology course, even with a critical and historicist framing, can include differences in attendance requirements, assignment and testing styles, discursive engagement (e.g., discussion boards, breakout discussions, etc.) and so forth. For example, the course that was used to sample participants for this study did not require students attend lectures and did not test the material, and contained only one assignment that would better be described as critical rather than historical. In other words, it is not to say the course was not delivered as a 'new history,' but rather to highlight the diverse approaches to disciplining the history of psychology (e.g., assignments or exams, group or independent work).

The risk of an unrepresentative or poorly representative sample greatly restricts the external validity and transferability of the present results. Future research may include multiple sections, and even multiple universities to sample from. York University is the one of only a handful of universities in Canada with a historical graduate program (Historical, Theoretical, and Critical psychology) which means some of the participants, as well as many undergraduate students in the psychology department, have had the chance of encountering historicist and contextual approaches to psychology prior to taking the history of psychology course through specific courses or professors.

The absence of pre-test interview with students prior to taking to history of psychology course could be seen as a limitation by arresting the ability to make causal connections about the history of psychology course on students PE. Another potential limitation was that there was no comparison with students who took a whiggish history of psychology course. Instead, the current project aimed to look at how the students themselves interpreted their positions on knowledge in the context of their experiences. I was not interested in measuring or grading the amount students' beliefs about knowledge and knowing grew thereby feeding into the hierarchical and uncontextualized notions about personal epistemology. Furthermore, since mainstream psychology typically adopts a progressive and objective approach to teaching psychology already, it was utilized as a kind of baseline in the present study.

When it came to the interviews, there was a missed opportunity to ask participants whether they associate psychologists with scientists, artists, or perhaps neither. First, this limited my ability to interpret some of the data extracts about truth searching as related to students perceptions of psychology and psychological knowledge. In other words, I could not mindfully extend answers about who is and who is not searching for truth to psychologists based on

participants' answers regarding scientists and artists. Although one student did classify psychologists with scientists, the other three participants seemed to position psychology somewhere in the middle of science and arts. Second, it is fruitful to know what perceptions aspiring psychologists hold of established psychologists for numerous pedagogical reasons. Psychology students' perceptions about psychologists have the potential to become self-perceptions and examining this can help to understand what kinds of psychologists are being produced by the academy.

### **Conclusion**

The effects of the disciplining of the psychology curriculum, particularly at the undergraduate level, on students' ways of knowing and perceptions of psychological knowledge has been debated across multiple academic disciplines and fields. The topic of personal epistemology and ways of knowing has been approached by academics from an assortment of theoretical backgrounds such as educational and cognitive psychology (Perry, 1970; King & Kitchener, 1994), feminist studies (Belenky et al., 1986) critical pedagogy (Dempsey, 2018), and history (Danziger, 1994). As a result, the interpretations that come from these works and the implications associated with their findings vary greatly. My aim of this study was to illuminate and draw connections between the rich but often disconnected literature while empirically analyzing the influence of the history of psychology course on students' conceptualizations of knowledge and knowing. Although previous models on personal epistemology were utilized, I tried to refrain from framing the participants' analyses as stage-like or hierarchical and instead provide an individualized and situated perspective of psychology students' ways of knowing. Furthermore, participants' epistemological positions were co-constructed through the interview and analytical processes and viewed as constrained by the sociohistorical, situational, and

interpersonal contexts in which the research took place. Conceptualizing ways of knowing and knowledge as actionable and practical means participants' responses can be interpreted as enactments or instances of the participants' ways of knowing that they employed to serve a specific goal or purpose. These more recent descriptions of personal epistemology and ways of knowing allows the field to continue to progress and provide valuable information in light of broader disciplinary shifts in psychology, pedagogy, and philosophy.

The history of psychology is vital for contextualizing and analyzing not only psychology's content and history, but also understanding the function of psychology as an academic institute and its impact in the public domain. It is integral to the disciplining of psychology and the development of future psychologists which is why its position in psychology has persevered, but not without many wavering concerns, debates, and criticisms. One of the main debates addressed by the present study is whether a critical approach to teaching and learning history of psychology is the optimal pedagogical practice for promoting epistemological development in future psychologists as opposed to a ceremonial perspective. This research demonstrated that both students' and educators' personal epistemologies greatly contribute to not only what, but how knowledge is shared, received, and interpreted.

Another one of the field's concerns is in regards to the future security of the history of psychology. The main implication for this study was to advocate for the integral role that a critical history of psychology course plays in students' epistemic developments. In the present study, the history of psychology provided students with a suitable environment for developing critical competencies and informed practices as a result of inclusive perspectives and reflexive exercises. Participants learned new ways of understanding, interrogating, and verifying psychological knowledge. Participants expressed an understanding of various critical issues in

psychology, which they declared the history of psychology either introduced or reaffirmed for them. Based on the current study, the impact of history of psychology on students' ways of knowing should reflect its relevance in the undergraduate program and contribute to the discourse about the history of psychology course's security. Students' understanding of the history, philosophy, and critical issues within psychology is paramount for generating educated, critical, and well-rounded psychologists.

A second, complementary aim of the study was to understand if, and how, psychology students newfound epistemologies empower or disenchant their relations with the discipline. The complex relationship between individuals' epistemological development and their academic environment has been demonstrated by research across multiple disciplines, and was further explored in the present study. Scholars have also suggested that the methods of teaching, for example the history of psychology, also have an impact on students involvement and motivation to actively participate as academics, professionals, and citizens (Rutherford & Pickren, 2015). Understanding the process of changes in students' epistemological development can provide insight on how to embolden future psychologists to contribute meaningfully to the field.

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## Appendix

### Interview Schedule/Protocol:

1. Greet participant and introduce myself as the researcher
2. Have participants sign informed consent
3. Begin interview

### Semi-structured interview:

#### Section A – Background

A1. What stands out for you in your life over the past few years? What kinds of things have been important? What stays with you?

A2. Tell me something about what your life is like right now. What do you care about, think about?

#### Section B – Self-descriptions

B1. How would you describe yourself to yourself? If you were to tell yourself who you really are how would you do that?

B2. Is the way you see yourself now different from the way you saw yourself in the past? What led to changes? Have there been any other turning moments?

B3. How do you see yourself changing in the future?

#### Section C – Educational experience

The central aim of this project is concerned with learning, education, and knowledge, so now I will be asking you about your experience in the history of psychology course.

C1. What do you think will stay with you about your experiences here in the history of psychology course? (Probe for specific academic and non-academic experiences, good and bad assignments, good and bad teachers/teaching methods)

C2. Has being in this course changed how you think about yourself? The world? Psychology? Psychological knowledge?

C3. In your learning during the course, have you come across an idea that made you see things differently... or think about things differently?

C4. What has been the most helpful to you about this course?

C5. Did anything in this course surprise you? What was it?

C6. Think back to the topics that were covered, were they relatable? How were they relatable?

C7. Of the topics that were covered, did you feel included or represented in the story? How did you feel represented?

(Probe, e.g., you mentioned you... identify as [a women, queer, visible minority, etc.] or with a specific social position/role [student, mother, etc.]

C8. Do you feel like you can apply the knowledge from this class to other classes?

C9. Was there anything you felt was left out or not discussed enough in your history of psychology course? What about with your experience in psychology in general?

## Section D – Ways of knowing

Now I'd like to do something a little different. This is a comment made by somebody else. (Hand the participant the card). I'd like you to read it aloud and then comment on it.

- A. 'In areas where the right answers are known, I think the experts should tell us what is right. But in areas where there is no right answer, I think anybody's opinion is as good as another.'

Probe extensively on this item. For example:

- D1. In learning about something you really want to know, can you rely on experts?
- D2. How do you know someone is an expert?
- D3. What do you do when experts disagree?
- D4. How do you know what is right or true?
- D5. Do you agree with this person who says that where there are no right answers anybody's opinion is as good as another's?
- D6. Sometimes people talk about "searching for truth," I'm not sure what they're talking about. What do you think people mean when they say that?  
Is that what scientists are doing, do you think? Searching for the truth? Will they find it?  
What about artists (painters, writers, and so on)? Are they searching for the truth?
- D7. Do you think the social location (e.g., culture, gender, class, etc.) of the knower influences what is considered knowledge and truth?

## Section E – Conclusion

Okay, thanks. Now before we stop I have a just one or two more questions.

- E1. What will you and your life be like fifteen years from now?
- E2. Are there any questions that I should have asked you, that would have thrown some light on these issues we are interested in... that is, psychology students' ways of knowing and/or your history of psychology course experience?